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DISEASES OF THE HEART MUSCLE.

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In the average books on medicine and diagnosis, affections of the heart muscles occupy about one-tenth as much space as endocarditis, yet it is a known fact that, with the exception of the heart murmur, the symptoms and signs attributed to endocarditis are the result of changes in the heart muscle, and that the prognosis in endocarditis depends not upon the endocardial lesions, but upon the integrity of the masculature. It is also known that the treatment, if wisely conducted, is governed entirely by the condition of the heart muscle and has no effect whatever upon the endocarditis, unless it be of syphilitic origin, and the treatment specific.

Heart murmurs are frequent. Many of them go undiscovered, while many are diagnosed in individuals who seek medical advice on account of certain symptoms (as air hunger upon ordinary exertion, or slight swelling of ankles), which are not due to the endocarditis, but, being associated with a heart murmur, the one sign which thrusts itself upon the examiner, they are promptly attributed to valvular endocarditis. We know that in the great majority of

cases of endocarditis there is an associated myocarditis, and in the minds of some it is a question as to whether or not endocarditis ever exists without some degree of myocarditis. This fact has led to the mistaken idea that the myocarditis is a secondary process and the result of direct extension. This may be the case, but in the great majority it is a part of the general process which has called forth the endocarditis.

Dry or plastic pericarditis is likewise thrust upon the examiner by a to-and-fro murmur produced by the movements of the heart. Other symptoms, if present, are due to changes in the heart muscle. This is true even of the pain often associated with this condition. This being the case we must turn to the heart muscle for all the subjective and nearly all the objective symptoms and signs of organic heart disease: and in so doing we must discard much that is still found in text books under the conventional method of discussing each cardiac lesion separately and attributing to it many symptoms which really belong to associated lesions.

To interpret, clinically, the pathology of any organ we must first become acquainted with its functions. Our present understanding of the functions of the heart muscle has grown out of a long and heated controversy over the cause of the heart beat. At one time it was thought that the blood itself circulating through the chambers of the heart was responsible for the heart beat. Then anatomists and neurologists, finding ganglion cells and nerve fibers abundant in the heart muscle, paramount importance was given the neurogenic theory, which held that the heart beat originated in the ganglion cells. Gaskell's researches led to the myogenic theory, the support of which has resulted in the accumulation of knowledge which has almost revolutionized the diagnosis and treatment of cardiac affections. Gaskell demonstrates the following fundamental functions of the heart muscle-cells:

1. The power to produce a stimulus which can excite the heart to contract—stimulus production;

2. The power of being able to receive a stimulus—excitability;

3. The power of conveying a stimulus from fiber to fiber—conductivity;

4. The power to contract when stimulated—contractility;

5. The power to retain a certain amount of contraction even when the active movement has ceased—tonicity.

Mackenzie has done more than anyone else toward the clinical application of these functions. In 1893 Kent and His demonstrated a special bundle of muscle fibers leading from the right auricle to both ventricles, and Gibson, Keith, Mackenzie, Erlanger and Flack demonstrated that the special functions of excitability, contractility

and conductively depend, in large degree, upon the integrity of these special fibers—thus throwing new light upon the subject of cardiac rhythm. It is known that every function possessed by a cell in the fully developed state, however specialized it may be—nervous, muscular, or secretory—exists partially developed in the primitive cell. By a gradual process of specialization the cells of the body, equally endowed in the beginning, take on their peculiar functions, and lose those they no longer exercise. So it is with the development of the heart. Mackenzie suggests as a working hypothesis "That in the evolution of the heart muscle-fibers, certain functions of the primitive cell were retained, some of these being more developed than others—according to the duties the fibers had to perform—so that while they have come to resemble muscle fibers, they nevertheless retain in a varying degree some functions which are highly specialized in the nerve cell."

That we may better understand the fundamental functions we consider—

1. *Stimulus production.* It is assumed that the muscle fiber secretes a material which stimulates the fibre to contract. With each diastole a sufficient store of stimulus is secreted to excite the heart to contract. With each contraction the store is exhausted, and so, in co-operation with other functions, rhythmical character is given to the accumulation and exhaustion of this material.

2. *Excitability.* The construction of the heart muscles depend upon its excitability or its power of receiving this stimulus. When the heart contracts the excitability is lost, and is gradually regained during diastole. Under normal conditions the rate and rhythm of the heart are dependent largely upon these two functions.

3. *Conductivity.* By this we understand that each cell has the power of passing the stimulus on to surrounding cells and so the stimulus is conducted from its point of origin to all parts of the heart. Like other functions of the heart conductivity is entirely abolished after it has been exercised and is gradually regained.

4. *Contractility.* This is the most evident of all the functions. The circulation is maintained by the co-ordinated contraction of all the fibers of the heart. This function, also, is exhausted after a contraction and is regained during diastole. Within certain limits, the longer the period of rest the stronger the contraction. This may be dmonstrated by the size of the pulse.

5. *Tonicity.* Under normal conditions a certain degree of contraction or tone is maintained in all the muscles of the body, including those of the heart. Even during diastole the muscle fibers of the heart are not fully relaxed. Gaskell has shown that certain drugs increase or diminish the tone. Thus veratrum and digitalia prevent the relaxation of heart muscle in the frog, prolonging the

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period of complete contraction and lessening the period and degree of relaxation until individual beats can hardly be distinguished. While solutions of lactic acid and muscarin have the opposite effect, increasing the relaxation until the heart stands still in diastole. It is through the recognition of this function that we are able to understand some of the most significant features of heart failure. While all the fibers of the heart may be endowed with these fundamental functions, it is evident that there must be a specialization of functions, otherwise, instead of the co-ordinated movement of the different parts of the heart, all the fibers would contract at once. As it is, the functions of stimulus production and excitability are more highly developed in certain fibers about the termination of the great veins and contraction starts here and travels throughout the heart, each chamber contracting in the regular order necessary to maintain perfect circulation. If any other part of the heart becomes more excitable than the venous end, then the contraction starts there and the regular order is interrupted and heart failure may result.

At an early stage in development the heart appears as a tube at the end of which is found the sinus venosus into which the veins of the body empty. In the course of development the auricles and ventricles appear and the tube, as such, ceases to exist, but probably becomes the A. V. bundle, and the sinus venosus is incorporated in the right auricle about the termination of the great veins. It is in this tissue that the functions of stimulus production, excitability and conductivity, are highly developed, and any pathology of these fibers may disturb the rhythm and efficiency of the heart's action. It must be remembered that the fundamental functions are under the influence of the nerves supplying the heart, though not dependent upon them for their continued exercise.

Quoting Mackenzie:

> "When one reflects that all the fibers of the heart are not equally endowed with the same functions, and that all the functions may not always be exposed to an equal strain, it is but reasonable to conclude that conditions may arise where they are unequally affected. As a matter of fact, this is what commonly happens, and it is an interesting and important question to consider in each case of heart failure what functions are especially at fault. The significance of this question was demonstrated when Wenkenbach showed how the irregular activity of the various parts of the heart were made manifest by certain characteristic arrhythmias.
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> "Following up the idea of exhaustion, or over-excitability of individual functions, I have sought to connect many of the symptoms of heart failure with these functions. While I do not say that my conclusions are invariably correct, they have led to some definite results of the very highest im-

portance, and it is along these lines that advance in our knowledge will likely follow for some time."

The graphic method of examining the heart has made possible the demonstration of many symptoms and signs which might otherwise seem to be mere assumption. So it has been demonstrated that irregularities with few exceptions (sinus irregularity and "pulsus alternans") are due to changes in the primitive tissue. That is, any disease of the heart muscle involving the tissue about the termination of the great veins or the auriculo-ventricular bundle, may cause arrhythmia by depressing or exciting the functions of stimulus production, excitability and conductivity.

The depression of *contractility* is to be recognized by the limitation of cardiac response, or the too quick exhaustion of the reserve force of the heart muscle, as shown by shortness of breath upon slight exhaustion, or a feeling of tightness across the chest upon sudden exposure to cold air or upon exertion, and sometimes, attacks of angina pectoris. The changes in the heart muscle are further evidenced by the *pulsus alternans*, the graphic expression of which shows plainly in the small pulse wave, the exhaustion of contractility, followed by a long pause during which the contractility is regained, as manifested by the large pulse wave immediately following the pause.

Failure of tonicity, means dilatation of the heart. With this explanation of dilatation we may dismiss the unsatisfactory and inadequate mechanical theory. The symptoms of dilatation are:

(1) Changes in the heart itself, as increased size, alterations in the position and character of the cardiac impulse, and the presence of murmurs.

(2) The evidence of stasis in other organs and tissues of the body, as dropsy, enlargement and tenderness of liver, and shortness of breath.

(3). Often reflex phenomena, such as hyperesthia of the skin, breast and muscles of the left side.

With this brief and imperfect statement of the symptoms and signs arising from the disturbance of the fundamental functions of the heart muscle, and keeping in mind the possible combinations in any extensive disease of the myocardium, we may readily see what a varied symptomatology may be exhibited by any affection of the heart muscle. The clinical picture depending largely upon the extent and distribution of the pathology.

Bart, in Albutt and Rolleston's System of Medicine, says:

"In estimating the clinical phenomena dependent upon the changes wrought by myocarditis, we must not forget the hidden ancestry of the cardiovascular system, and that the heart, although in the course of evolutionary changes, highly differentiated, has not al-

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together lost its primordial intrinsic function of rhythmic contraction, a function which, although in a great measure now subject to the guidance of the nervous system, is by no means dependent upon extrinsic nervous impulses. Whilst in health this measure of automatic mechanism secures a great saving of energy; in disease, on the other hand, it is very conceivable how myocardial changes of inflammatory or other source should bring about disturbances of cardiac rhythm of very grave kind and but little amenable to outside nervous control. This view furnishes us with a better insight into the cardiac defects from myocarditis than is otherwise attained. The cardiac phenomena significant of myocardial change, apart from valvulitis, are dilation and irregular action, which is an arrhythmia of contraction of the muscle from inco-ordinate action of parts no longer possessing their original homogeneity, and presenting positive interruptions or blockings of the conductive paths or areas."

The lesions of the heart muscle may be conveniently considered under the following headings:

1. Impairment Due to General Blood Conditions;
2. Impairment Due to Altered Blood Supply;
3. Impairment Due to Senile Changes;
4. Impairment of Inflammatory Origin;
5. Impairment Due to Functional Strain;
6. Tumors of the Myocardium.

Under impairment due to general blood conditions, we consider anemia and toxic changes. In cases of severe anemia the heart muscle becomes paler than normal and on section it is wet and flabby in appearance—fatty degeneration may result, giving rise to the flecked or streaked appearance of the inner surface of the left ventricle. In such cases there is often evidence of enlargement of the heart and relative insufficiency of the mitral valve. The pulse is quickened and the heart is peculiarly susceptible to nervous influences and physical exertion.

Under toxic changes we may have cloudy swelling or fatty degeneration. Cloudy swelling is very common in the course of the infectious fevers due to toxins in the blood. It may occur either with or without long continued fever. The heart muscle has a grayish-cloudy appearance and under the microscope the fibers are opaque on account of the minute granules which observe the nuclei and striae.

Fatty degeneration is very common and is characterized by small globules of fat deposited in the muscle cell. The degeneration may be general or circumscribed. In advanced cases, especially where there is anemia, the heart muscle is pale and of a yellowish white or clay color and cuts like cheese. The most common of the general causes are, the infectious fevers, especially, diphtheria and typhoid

the anemias, as leukemia and pernicious anemia; poisons, such as phosphorus, arsenic, lead and sulphuric acid. In phosphorus poisoning, not immediately fatal, fatty degeneration of the heart is the chief source of danger. It is believed that fatty degeneration of the heart muscle may undergo repair by absorption of the fat and the formation of new muscular tissue.

Impairment due to altered blood supply depends chiefly upon permanent changes in the coronary arteries, and its consequences embrace the most important lesions of the heart muscle. Narrowing of the coronaries through atheroma may arise from any of the accepted causes of arterial degeneration, as age, syphilis, gout, alcoholism, physical strain, etc. The local anemia induced by such a condition may give rise to fatty degeneration which differs from that described above, in that it is much less acute and more patchy in its distribution, also, that in the process of degeneration there is more or less atrophy of the muscle fibers with the substitution of fibroid tissue (fibroid or false hypertrophy).

This substitution of fibroid tissue may serve to preserve partially the strength of the cardiac wall, but without contractile power. The size of the heart and the thickness of its walls depend chiefly upon the amount of fibroid substitution and the degree of dilation of the ventricles. This condition is most common in men after fifty years of age. The symptoms depend upon the extent of the degeneration and the regions involved. Irregularities, dilatation and limitation of cardiac response are common.

Fatty infiltration of the heart must not be confused with fatty degeneration. A certain amount of fat is normally found at the base of the heart and along the course of the coronary arteries. This is increased in fatty infiltration and fat is deposited in the interstices of the muscle fibers, compressing them and causing atrophy. This condition is met with in those of sedentary habits, with good appetites and good digestion. It is favored by indulgence in alcohol, especially, malt liquors and sweet wines, and by over-eating. Also, by chronic pulmonary conditions limiting the respiratory surface. This condition is to be suspected where there is enlargement of the heart with evidence of cardiac weakness and shortness of breath, in individuals who are stout—with full abdomens and often tender livers.

Fibroid infiltration, or interstitial myocarditis resulting from coronary obstruction, is associated with fatty degeneration. The blood supply is sufficient to maintain the overgrowth of inferior connective tissue, but not sufficient for a tissue of such activity and reparative requirements as muscle. These hearts, except some in the very old, are always large. The increased size is due both to the "false hypertrophy" and the dilatation of the cavities. This condition may be induced also by chronic congestion of the heart from mechanical obstruction of the return flow in the cardiac veins. Anything interfer-

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ing with healthy respiration impedes the return flow (emphysema, cirrhosis of the lung, fibroid phthisis, and unresolved pneumonia); such congestion may result from advanced mitral disease.

Local fibroid infilteration may follow any obstruction of coronary branches, pericarditis with adhesions, or acute myocarditis. Fibroid infilteration usually represents an effort at repair and it often helps to prolong the efficiency of the heart muscle.

Here, too, we may expect a wide range of symptoms depending upon the particular functions involved. The heart is enlarged; the impulse labored, and increased in area; the heart sounds are often dull and the pulse is not well sustained.

Aneurysm of the Heart. This is a rare condition and difficult to recognize clinically. It is nearly always at the apex of the left ventricle and may result from any condition destroying or weakening the muscle fibers—fibrous myocarditis is the most common cause. Aneurysm may cause death by rupturing into the pericardium, or by mechanical interference with the heart's action.

Thrombosis is a frequent result of atheromatous changes and is also caused by specific arteritis. Occlusion by coagulation is most common near the origin of the coronaries, because the atheromatous changes are usually more marked here. Thrombosis deeper in the heart is usually of syphilitic origin.

Embolism of the coronaries may be due to the same conditions that give rise to embolism in the systemic vessels. The emboli may be of the fibrous type or septic, as in cases of infective endocarditis. Occlusion of a considerable branch of the coronary artery may cause fatal angina, otherwise, rapid heart failure with irregular action, shortness of breath and repeated attacks of angina.

Impairment Due to Senile Changes. In nearly all people after middle life there is an accumulation of hematoidin granules about the nuclei of the heart muscle cells, giving rise to the condition known as pigmentary degeneration. Atrophic changes are usually present. The atrophy of old age may be marked. Sometimes the heart is reduced to one-third its normal size. The epicardium is wrinkled and the vessels torturous. The muscle is flabby and dark in color due to pigmentation.

Impairment of Inflammatory Origin. We have already described interstitial myocarditis under Fibroid Infiltration. It consists of an irritative overgrowth of the interstitial tissue of the heart, arising through circulatory disturbances, general or local, as chronic congestion of cardiac veins or obstructed coronaries, or through endocarditis or pericarditis. Myocarditis has been experimentally produced in the rabbit by intra-venous injections of Adrenalin. The changes are attributed to the mechanical strain arising from the increased blood pressure.

Parenchymatous myocarditis, which is secondary to infectious

fevers, is, according to Bart, probably a very active form of the preceding process. Leyden regards it as an acute myocarditis characterized by intermuscular nuclear proliferation and by secondary atrophic changes toward necrosis and deposition of pigment; fatty degeneration accompanies it.

Purulent myocarditis is usually secondary to infective embolism of the coronary vessels, as in pyemia and malignant endocarditis. Syphilitic myocarditis may manifest itself as a syphilitic arteritis giving rise to chronic myocarditis. Thrombosis may occur with ultimate fibrosis of the area involved, in case fatal angina does not occur. There may be gummatous formation in the cardiac wall with surrounding chronic myocarditis. Gummas most commonly occur in the ventricles or septum. They may soften or undergo fibroid change and are always surrounded by fibroid changes as a result of the chronic myocarditis.

There may be a diffuse chronic myocarditis affecting a large portion of the heart. It is possible, however, that this diffuse myocarditis originates in the fusion of scattered gummatous deposits. Sudden death, without previous recognition of the disease, has terminated most of the recorded cases of gumma of the heart. In cases with evidences of chronic myocarditis, and the absence from the history of rheumatism, gout, alcoholism or strain, we are justified in thinking of syphilis, especially, if there is a specific history or collateral syphilitic lesions.

Impairment Due to Functional Strain. Hypertrophy of the heart may result from a prolonged effort of the heart muscle to overcome increased resistance to the circulation as in atheroma or Bright's Disease, or to compensate some valvular defect. Such hypertrophy is, for a time, successful, but ultimately through degeneration of the muscle and the consequent impairment of the fundamental functions, heart failure ensues.

Hypertrophy due to coronary obstruction, and pericarditis with adhesions, is not real hypertrophy, but due to fibroid changes secondary to chronic interstitial myocarditis. There is an idiopthic or simple hypertrophy due to excessive cardiac exercise, muscular exertion. It is claimed by good authorities, especially the French, that the heart becomes hypertrophied during pregnancy. This hypertrophy is attributed to the enlarged uterus and toxic products. Acute strain of the heart may mean sudden over distention. In the presence of obstructive valve lesions such strain may induce over-distention to the suppression of function, and sudden death.

Tumors of the Myocardium. New growths in the heart are rare. Hektoen in 1893 reported about 110 cases recorded in the Surgeon's office at Washington and in the Index Medicus. Berthensen, about the same time, reports thirty published cases of primary new-growths of heart, as follows: Sarcoma, 9; Myxoma, 7; Fibroma, 6; Carcinoma,

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3; Lipoma, 2; Syphilitic, 2; Cyst, 1. About four-fifths of the reported cases have been males and the tumors were found in the left heart or septum in about two-thirds of the cases. It must be remembered that syphilitic growths seldom amount to tumors and are much more frequent than indicated above. Secondary growths are not common, although both carcinoma and sarcoma have been found post-mortem. Secondary melanotic growths are often found in general melanosis.

REFERENCES.

Bart, Sir R. D. P. Diseases of the Myocardium—in Allbutt & Rolleston's System of Medicine.

Allyn H. B.—Prognosis in Chronic Valvular Disease of the Heart—American Journal of Medical Sciences, 1910.

Stengel, A. & Pepper, Wm.—Heart Block with an Indication of Genuine Hemisystole—A. J. of M. S., 1910.

Stokes, W. R.—Myocarditis. J. A. M. A. Vol. LV., No. 13.

Plehn—Abstract—J. A. M. A., Vol. LV., No. 16.

Moran, A. J., of Obstetrics, and Dis. of W. & C. Heart Disease in Pregnancy and Puerperium.

Sears, Boston Medical & Surgical Journal.

Mackenzie, James—Diseases of the Heart, 1910.

Stengel, Alfred—A Textbook of Pathologie und Therapie, 1909.

Cabot, R. C.—Physical Diagnosis, 1910.

Adami—Principles of Pathology, 1908.

Brooks, H.—A study of the Myocardial Changes in 287 Cases of Endocarditis.—J. A. M. A., Vol. CXLII. No. 6.

FRACTURE OF THE SKULL—NOTES OF FIFTEEN RECENT CASES.

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In these cases of fracture of the skull are included all classes, from a simple linear fracture of the inner table, to a crushing injury to the vault. I omit the causes of fracture, as they are all due to traumatism, and ask your attention, more particularly to the indications for operation and the end results of treatment.

Alcoholism, sunstroke, uraemia and concussion are to be differentiated from fracture, and of these, concussion will be the most frequent and most difficult to determine. Considering the intricate merging of the symptoms of the two conditions—and often you find both present in the same patient—the correct diagnosis will be made in direct proportion to the experience, close observation, and the faculty of deduction of the attendant.

Cases of concussion are not operative, but trephining will not injure your patient, so if in doubt, operate.

By no means allow your patient to go more than seventy-two hours without improvement and still think it a case of concussion, for if you do, you will, perhaps, sign a death certificate and not be sure

of the truth of the statement therein. When a patient presents the history of trauma to the skull and the symptoms are unconsciousness, vomiting, the reflexes gone and the classical train of brain symptoms; there is no depression of the bones, extravasation of blood, nor hemorrhage from the eye, nose or ear, you are justified in waiting twenty-four to forty-eight hours unless more positive symptoms develop; but if there is no improvement at the end of that period, operate and you will find a depressed fracture or a blood clot.

Should you find the train of symptoms above described, together with extravasation of blood into the soft tissues, away from the site of the injury, operate--and start your incision in the neighborhood of the discoloration and extend it around to the site of injury.

If you are unable to demonstrate a fracture, trephine over the artery supplying the injured region. Do not hesitate to expose enough of the skull to be positive as to the presence of a depressed fracture, or simple fracture, if one exists. If still in doubt, use a small trephine and then turn back a bone flap, by using a Devilbiss rongeur or chisels and explore well. That part of your flap, to which the periosteum remains attached, will grow back quickly, but large areas of bone may be removed completely, without untoward results. Drainage should be maintained for twenty-four hours or longer and if the hemorrhage is sub-dural and it is necessary to open the dura, the same rule still holds good.

Have a care with your scalp wound, that you do not needlessly crush it with hemostats or tie it full of catgut (and get infection), or carelessly close the wound and let your hemorrhage from it trickle back under the skull. A clot on the brain produces certain bad results, irrespective of how it originated.

The following cases have been treated in the P. and S. Hospital, Tulsa, by Doctor Butler and myself, recently, and cover rather a wide range for the limited number.

(1)—A man thirty-four years old received a crushing blow on top of his head, caused by a heavy pipe wrench falling on him from a distance of seventy feet.

A compound, comminuted fracture resulted, which nearly cost the patient his life from hemorrhage. Twenty-four hours later, when he reached the hospital, it was seen that the longitudinal sinus was involved and preparation was made for a terrific hemorrhage, when the depressed bones were elevated.

The anticipation was realized as soon as the first fragment was elevated. Bleeding was controlled by the introduction of a finger to compress the sinus and the flow later controlled by carefully tamponing gauze strips around the finger as it was withdrawn. The gauze was removed the fourth day without bleeding and the scalp wound then closed. Consciousness was restored in a short time and the hemiplegia showed improvement within twelve hours. This man had only

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partial co-ordination in his leg, following his recovery, and later visited the Mayo clinic, where he again underwent a decompression, but without results. He is about his business again (a driller), but has a jerky, high knee action in the leg and is unable to safely step backwards, quickly. Otherwise, he is entirely normal.

(2)—A case still under observation, in a man twenty-nine years old, who had a fracture of the inner table only, from being sand-bagged, in which both branches of the middle meningeal artery was broken, resulting in an enormous clot, which was being added to by the still bleeding vessels, was cleared up in a short time by the removal of the clots and stopping the hemorrhage. He developed a complete ptosis of the eye lid on the side of the injury and this irritation of the third nerve was caused by the injury deep in the brain substance, but he has recovered. I might add that this man was syphilitic, and was put on generous doses of K. I., but whether that influenced the progress or not, is a question.

(3)—A man twenty-six years old, was struck by falling timbers on the back of his head. A recital of his symptoms would not enable you to say whether he had a fracture or concussion. His attending physician did not believe it a fracture, but with no improvement in forty-eight hours, consent was obtained to operate, in spite of the protest of the attendant and a trephine opening half an inch to the left and above the transverse sinus, revealed a clot which necessitated the removal of a large area of bone for its removal. Convalescence was rapid and smooth.

(4)—In a very similar case, a man twenty-two years old, was knocked down, falling on the sidewalk and striking the back of his head.

It was repeatedly urged that the case should be operated on, after forty-eight hours, but the family deferring to the opinion of the attending physician, refused consent. The patient was in a semi-comatose condition for two weeks, after which he was violent and extremely delirious, at times, for several days. He then became quieter and was removed to his home. After three months he resumed his position as Auditor, and was apparently well, leading us to think perhaps we were mistaken about a hemorrhage, but on the third day after beginning work he fell from his stool and later was removed to his home in a distant state, where a few weeks later he died from softening of the brain, caused by pressure of a clot in the fossi occipitalis.

(5)—Slipping on the icy sidewalk, a man sixty-two years old, fell heavily backwards, striking the back of his head. He was able to arise and walk some eighty feet to his room. He made little complaint for eighteen hours, after which he complained with pain in his head and gradually mental symptoms, loss of co-ordination, and at the end of sixty hours, lapsed into unconsciousness. Those in authority refused him an operation and three months later, when he died of softening, it

was demonstrated that he had only a slight fracture of the inner table of the occipital bone, opening a small vessel, the slow leak from which explained the delayed, alarming symptoms. Both of these men could have been saved by operation.

(6)—A blow from a beer bottle, received an inch to the left and three inches anteriorly, from the center of the top of the head, rendered a man aged fifty-one, unconscious for a short time only. He was not confined to his bed and apparently was not much the worse for his injury. Three years later he suffered great pain, dizziness, vertigo, etc., the symptoms coming on very gradually, and within three months from the first symptoms, he had a stroke of paralysis, from which he had been partially recovered when brought to the hospital. A diagnosis of compression was made and on turning back a bone flap over the site of his old injury an area of bone as large as a silver dollar was found very much thickened and rough, and so densely adherent to the dura that difficulty was experienced in freeing it. This man recovered slowly, but his improvement was progressive and permanent and at this time, four months after operation, he is all right.

(7)—A girl twelve years old suffered a fracture that extended from the crown to the orbit, and laterally from the crown through the temporal bone to the base. Seen six hours after the accident, unconscious, ecchymosis into the eye and bleeding from the ear. Trephined, removing piece of bone two inches square, extended the wound to base of skull, removed clots. Also enlarged the opening made by the lateral fracture, removed clots which were extra-dural. The opening in the dura at place of first trephining was sewed up, except for drainage, which consisted of iodoform gauze tape, which was also used at lower angle of wound at base. Patient regained consciousness as soon as the anaesthetic was over and left hospital in two weeks. Has had no symptoms since.

(8)—Male, aged forty, was struck on the head by a brick. Saw him forty-eight hours afterwards, when he was being treated for concussion. The wound was opened and a trephine opening showed a rupture of the middle meningeal artery. A clot one inch thick by three inches in breadth, was removed, the bleeding stopped by a gauze tampon and the wound drained by gauze tape. Patient regained consciousness immediately. There were no complications and the wound healed by first intention.

(9)—On the opposite side of the head from the wound received, a man thirty-three years old, developed an ecchymosis into the eye, twelve hours after the injury. His head had been sewed up. He was not unconscious, would answer when spoken to, but had a very slow pulse and was vomiting occasionally. There was no depression. Taking the cue from the extravasation, he was trephined and a linear fracture three inches long, extending from the orbit to above the ear, was found. The clots were removed, the wound drained and the patient was rational as soon as he came from the ether. Went home in ten days.

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(10)—A sixty-year-old man received a blow on the occiput and was treated for concussion for three weeks. When I saw the case I trephined and removed a subdural clot that weighed two ounces. The wound was closed without drainage. The patient did well for six days, when he began to have pain in the head, which became more and more severe and he died in convulsions on the twelfth day. I think I should have drained this case.

(11)—An oil field employe was struck by a falling derrick and his skull crushed. He was unconscious, had a slow pulse and dilated pupils. On exposing the skull, it was found necessary to remove portions of the frontal, temporal and parietal bones, measuring two and one-half by three inches. The dura was lacerated and one-half ounce of brain substance removed, closed and cleaned, and the wound closed over gauze strips, that were removed the third day, and the patient sent home at the end of two weeks, well. This man, too, regained consciousness as soon as the effects of the anaesthetic was over.

(12)—A young man, twenty-one years old, was kicked by a horse when he was eight years old. There was loss of brain substance and the boy was thought fatally hurt. He recovered, however, and developed epilepsy six years later.

His operation consisted of trephining, breaking up all adhesions of the dura and the removal of a small cyst on the dura. This opening in the dura was closed with Cargyle membrane and a bone flap taken from the outer table of his skull, was turned into the bone opening, made by the horse's foot, and the trephine, and the wound closed, with a small drain down to the Cargyle membrane. Three years since the operation, and he has had no epileptic siezures whatever. I report this case, not because it is recent, but because it illustrates the necessity of finding out "where you are at" in fractures.

(13)—Girl, aged seven. Punctured wound on right side in the edge of her brain. Bone driven into the brain. Enlarged the wound, removed the spicula of bone, together with some hair. Some brain substance lost. Drained for forty-eight hours in the brain wound and for seventy-two hours in the scalp. Wound granulated. Recovery complete. This patient was never unconscious, but had a slow pulse and her pupils were dilated.

(14)—A girl, aged seven, received a blow from a falling board which laid open the scalp and showed a depressed fracture of the parietal bone. There were no symptoms of fracture, whatever, except the fracture itself, the depressed bone was elevated, a wick of gauze stopped a slow leak in a small vessel and there was no symptoms of severe injury ever developed. She was about the halls of the hospital the following day and refused to stay in bed.

(15)—In undertaking to investigate an empty metal oil tank, by the use of a lighted match, a young man had the upper portion of the frontal bone on the right side caved in. He was more than twenty

hours getting to the hospital, and when the interior of the skull was explored, a very large clot had formed in anterior fossa, but the bleeding had stopped. This man got up within two minutes after he was hurt and walked a mile to his boarding place.

When he entered the hospital he was mentally bright, suffered little pain, his reflexes were normal—in fact, the only subjective symptoms of brain injury was a slow pulse and respiration.

Had it not been apparent to even a non-professional observer, that the skull was fractured, neither of the two last causes referred to would have reached the table until hours or days later, when grave evidence of serious injury, supervened. You don't have a text-book picture in every case of skull fracture. The line of demarcation is not broad, neither is the trail blazed, but following safely, an indistinct trail marks the master of woodcraft.

DISCUSSION

DR. C. J. FISHMAN, Oklahoma City.

There is one little point I want to say in regard to the term "concussion." A little simple procedure will frequently develop it in the differentiation between concussion and hemorrhage. No one can tell whether or not there has been a disturbance, a mechanical disturbance of the nerve fibres or a pressure from hemorrhage after the patient is injured, and there is some degree of unconsciousness.

In February, I read a paper before the First District Medical Society, in Oklahoma City, on the subject of "Lumbar Puncture," and at that time I brought out a point which I think is useful today, and that is this:

That in cases that are supposed to be concussions of the brain, a lumbar puncture, which is a simple procedure, harmless to the patient, and of great use to the operator, will frequently disclose hemorrhage in the fluid, and that gives you an indication of the rupture of some vessel somewhere in the cerebro-spinal system. More particularly if the blood is a dark blood, you are very sure that the blood has been there for some time. Lambert, of New York, made the statement that in cases of brain injuries, if the lumbar puncture needle was used, there would be very few cases of brain concussion, and most of them would be classed as brain hemorrhages. Some would need to be operated and some would not. I am not going into the discussion of these details, but the term "brain concussion" would become much less used and brain hemorrhage would become much broader defined than it is now.

DR. LANDRUM, Altus.

We have just had fifteen cases recited by the essayist, from the standpoint of the surgeon. We have not heard from any of the

patients themselves, yet. If you don't mind, I will recite the case of the patient—my own person.

I had the misfortune to have a basal fracture, myself. I had hemorrhage from the ear, from the throat, dilation of the left pupil, slight paralysis of the right arm and right leg. I was getting out of my buggy and missed the step and fell about sixteen inches. My head was about sixteen inches from the dust bed of the road when I had my fall. (It is immaterial how I came to fall.) That is the last I remember, when my head was within sixteen inches of the ground, until I awoke in front of the fire station and the boys had deluged me with water from the hose. They told me it was about three-quarters of an hour after my fall. That is important, because that situation is usually given in the history of these cases. I remember further telling them to telephone my wife that I wasn't hurt much, and that I would come home in a closed carriage, instead of on a stretcher. They put me in the carriage, and I remember being taken home and being very sick and vomiting out of the window, and at the same time feeling a sense of humiliation at vomiting along the street and being taken home in a cab. I have a hazy recollection of walking in at the front gate and being laid down on the bed. I don't remember anything else distinctly for sixteen days after that. They say I was completely delirious during that sixteen days, and immediately after they put me down my pulse dropped to ten, twelve and twenty and my lips were blue, my eyes were sunken and they thought I was dead. I recovered from this, however, with some vomiting during the night, and I have very fleeting recollections of unimportant incidents during that sixteen days. Have no collected memory of what happened during that time, and in three weeks I lost about sixty pounds. My normal weight was 160 and I was depreciated to 100 pounds. I recovered so I could be at my office in about five weeks from that date. The doctors thought it was a very clear case of fracture of the base; one wanted to trephine and the others argued against it. I don't know whether the trephining should have been done, but they did not do it. They gave me a pretty severe purging and some counter irritants at the back of the neck, ice pack to the scalp, and that is about all, waiting for developments. I made complete recovery.

DR. JOLLY, Oklahoma City.

The importance of fractures of the skull is not the fracture itself, but its complications. I was in hopes that the Doctor would dwell more on the symptoms that require operation. Now, there is only one symptom, I mean one condition that we can usually benefit by operation and that is the pressure symptom.

Of course, we have to differentiate between concussion, contusion and compression. I remember when I studied medicine, that differentiation was very easy. In one case we had contracted pupils, concus-

cussion and contusion, and in the other one dilation. That doesn't mean so much now. In concussion and contusion we have no pressure symptoms, and we cannot benefit these cases by operation, except it might be in a depressed fracture of the skull, relieving that. The pressure symptoms that can be remedied by an operation are a depressed fracture, hemorrhage and edema. In extradural hemorrhage there is usually an interval between the injury and the compression symptoms. One way we usually make the diagnosis of hemorrhage from the middle meningeal artery. The interval between the injury and pressure symptoms. Intra-cerebral and sub-dural hemorrhage pressure symptoms are immediate and continuous after the accident. The edema usually comes from contusions and may be some time after the accident. I have seen cases nearly a week after the accident with pressure symptoms from contusion. Our diagnosis of pressure symptoms is increased blood pressure, full bounding, slow pulse. In concussion we get the opposite, rapid pulse. Another symptom is choked disc, that is always reliable. We can get early pressure symptoms by use of the ophthalmoscope tortuosity of retinal vessels, and later, of course, the complete choked disc. I suppose the Doctor has means of localizing these injuries, I see most of his cases where he cut down on the clot, so he had to do that before operation. If we have a depressed fracture, we know where to enter the skull. Also in extradural hemorrhage, but there are other pressure symptoms that it is very difficult to know where to open the skull. Frequently these are basal injuries, and the pressure is at the base of the brain, so opening the skull would not relieve these cases. You have to get down somewhere at the base and drain them. Of course, there are a few of us who know how to localize these injuries. I am sure I am not an expert myself, but I think in some cases that would be very necessary in brain surgery. Some of these injuries are plain, where we have a depressed fracture, we know of course, where to enter the skull. If we have got an extradural hemorrhage we know where to find the meningeal artery, but pressure in the brain substance itself, and at the base sometimes is very difficult to localize.

DR. REED, Oklahoma City.

This subject of brain surgery and surgery of the head furnishes us a rather sad chapter. Practically everything has been attempted about the head, in order to attempt to make improvements, which would compare favorably with the surgery of other regions, and we have practically come to the conclusion that surgery of the head is indicated in remarkably few instances, where we can say we are sure of getting results.

Fracture of the skull does no harm, per se. The fact that you may diagnose a fracture positively does not indicate that operation must be done at all. Then the fact that you have a depression

does not necessarily indicate that an operation is indicated. Also the fact that you have a slight hemorrhage does not indicate that you must operate. For we don't possess methods of approaching the brain which are themselves without danger. I think I can say that there is quite a large percentage of head cases that are really harmed in attempts at doing good. Particularly do I lay stress upon the fact that attempts at brain surgery in old fractures always results in harm to the patient. I say always, I will limit it by this remark: That they never do good. Who, in this house, for instance, has seen depressed fracture followed by epilepsy in a year or two years, who has attempted to raise a depressed fracture of that long standing and seen any benefit come from it, except a very temporary one? Haven't we seen them have temporary relief only and then get worse than they were previous to the operation? It has been my experience and observation that surgery of the head is beneficial when done in time, but it must be done soon after the injury.

DR. C. M. AMENT, Tulsa.

I don't agree with Doctor Reed's assertions and I am heartily in accord with Doctor Grossheart's paper, in this respect. I believe I am a conservative man in surgery, but I don't believe there is any place in surgery that calls for operation in every instance as much as there is in depressed fractures of the skull. I don't believe there is an exception, there might be. I think that every depressed fracture should be removed. Why? If you leave a depressed fracture in many instances it will be followed by epilepsy, and once an epilepsy is developed, it soon becomes no longer logical, but focal, and all the operations in Christendom won't help it. I wish to accord with Doctor Grossheart's statement that all depressed fractures should be operated on.

DR. GROSSHART, (Closing.)

Thank you, gentlemen, for the discussion, and also to the gentlemen for showing me how to apply the ligature. In answer to the doctor over here, who had the fracture which I deem from what he says, and from the history and diagnosis of himself, was at the base of the brain, he had a fracture and probably a slight exudate, one place in the brain if you don't get any infection that generally drains, as near drainage as can be gotten any place in the skull. And this recovery that he made was due to that one condition.

Probably if he will recollect back, the physicians gave him some iodide of potash. The only explanation I can make of that, while I believe, in that condition, had he had a trephine of the posterior part of the brain, and drainage established right behind the ear, that he would have gotten well and would not have been delirious and unconscious as long as he was.

In regard to Doctor Reed's comment upon the paper. That he thought there was doubt that fractures should be attacked, we will say, take up first depressed fractures. The patient may retain his mental condition, it may not be paralyzed, and with the exception of epilepsy that follows these conditions there would be no use to operate. But this being one of the great causes of epilepsy and one of a train of symptoms that follow these conditions, while the trephining and the necessary elevating amounts to nothing practically, to the patient, yet you do good not only from barring the probability of an epilepsy condition being established, but by rendering yourself and your patient this benefit, that you know whether or not there has been leakage under there and you have a blood clot. In one of the cases recited, where there was a post mortem held upon this individual, if you remember the case that died, that his fracture had been a very slight fracture, if you remember. But he had had quite a hemorrhage. It went on and on, and apparently got back so that he could go to work again. Then his trouble came on him after he fell from his chair and died from softening. That is the case that after it was let alone the man died, lost his life from neglect, either from his people, or from the surgeons, or the doctors, whosoever's fault it was.

As to Dr. Jolley's remarks in regard to concussion and fractures with pressure, if I understand him, he made a differentiation between the two by the character of the pulse; the pressure pulse was slow and the concussion pulse was rapid. My observation has been, I may not have seen any cases of concussion, but my observation has been of those cases that I have seen, that invariably, if you have a disturbed condition of the brain, that the pulses are invariably slow. Your reflexes and conditions that you get under these different pressure symptoms are diagnosed and exert themselves according to the location in the brain that they occur, from the simple fact that the anatomical condition of the brain is so arranged that I am not going to go into the detail of it, there are certain localities in the brain; they have the reflex areas, the mental areas, the speech center and so forth, and these conditions, if you watch your cases closely you will see the symptom of your condition as it arises and the one that is nearest to the point of your pressure, or where the most pressure is exerted, will be the symptom that is exaggerated. You may have an unconscious condition, but if you will watch the case closely, and watch the reflexes, you will catch the conditions, if you know the conditions, you can go to your anatomy and study it up and locate a great many conditions and know where to operate when you wouldn't know, maybe, off the reel. I thank you.

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SARCOMA OF KIDNEY IN INFANTS—REPORTS OF CASE.

DR. T. H. MCCARLEY, Atoka, Okla.

This paper is presented not as one covering the many features suggested by its title, for to do this would cause it to savor strongly of text-book articles on the subject. It is intended, rather, to call your attention to this comparatively rare condition from the standpoint of the difficulties of diagnosis, as illustrated by the case to be reported, for it is the rare pathological condition that we are slow to recognize and apt to class as one more frequently met.

Malignant tumors of the kidney in infants and children are perhaps ten times as frequent as the benign and, of the malignant, sarcomata are found five or six times as often as carcinomata. The majority occur in early childhood, about half of them during the first two years of life. In a few cases they are congenital.

Tumor, hematuria, and cachexia are regarded as the principal symptoms.

"The tumor is usually first noticed. It is in most cases discovered in the loin, but grows forward toward the median line. Its surface may be lobulated and irregular or quite smooth; and although solid, it is sometimes so soft as to give an obscure sensation of fluctuation. It may grow to an enormous size, causing displacement of the liver, spleen, intestines and lung. The progress of the growth is usually rapid, so that from the size of a fist, the tumor may grow in the course of five or six months so as to fill the abdomen. By careful palpation it may be found—certainly when the tumor is small—that, although it may be quite freely movable, its attachment is near the lumbar spine. Aspiration may show blood, but more frequently the result is negative." *

The quantity of blood in the urine is often so small as to be discovered only by the microscope, but in a few cases it is microscopic in amount and the first symptom noticed.

Cachexia and pressure effects increase steadily with the growth of the tumor.

Hydronephrosis, dermoid cyst of the ovary, reptroperitoneal sarcoma, tumors of the liver and spleen are to be eliminated in making a diagnosis. This last—enlargement of the spleen—was supposed by myself and consultants to be the correct diagnosis in the case of I am about to report.

On March 19, 1911, Mrs. J. R. was delivered by me of a ten-pound girl, her sixth child. Her two boys and other three girls are living and well. History of child's mother and father is that of continuous

*Holt, "*Infancy and Childhood*," 3rd Edition, Page 672.*

good health, and both maternal and paternal grandparents were free from cancer, tuberculosis and syphilis. At three months the child weighed seventeen pounds and was apparently healthy.

When the baby was about this age the mother noticed "a cake in the side" as she expressed it, which was attributed to a fall that occurred three or four weeks before. I was called and found the child well nourished and presenting no constitutional symptoms whatever. A smooth tumor of firm consisteney completely filled the left hypochondrium, extending anteriorly to the median line and inferiorly to a line drawn through the anterior-superior iliac spines. On deep palpation a notch was discovered about the middle of the inferior border. All other abdominal organs were normal in location and size. Diagnosis of enlarged spleen, cause undetermined, was made. Though the symptom-complex of malaria was not present, antimalarial treatment was begun, and several smears of blood were made for microscopic examination.

Examination of blood revealed no plasmodia, hemoglobin 80, red cells decreased, mild leucocytosis, with the large lymphocytes predominating and a few myelocypes present. This blood picture being typical of pseudo-lymphatic anemia of infants, and the clinical symptoms suggestive of it, this diagnosis was made.

Hygienic measures were insisted upon. Arsenic, strychnine and iron were prescribed and continued until August fifth, when I began the administration of sodium caccodylate in three-quarter-grain doses daily and continued it for five weeks. It was given on alternate days only when arsenical effects were manifest. While this course was being given, the weight of the child and size of the tumor remained stationary or nearly so.

Treatment was discontinued and I did not see the child again for three weeks, when all symptoms were decidedly worse. Another course of sodium caccodylate was given, and during the time of its administration the wasting was less rapid. Operation was advised as the only hope of relief. On December 4th, a colitis developed. This was relieved within a few days, but left the patient much weaker and weighing only thirteen pounds.

The father very much surprised me a few days later by saying that he had decided to discontinue all medical treatment and cure the child by faith. From then until death closed the scene, March 19th, 1912, I saw the child two or three times. She took a great deal of food and digested it remarkably well. Toward the last emaciation was the most marked I have ever seen. The tumor nearly filled the abdominal cavity, perforating ulcers of corneae occurred, the skin literally clung to the bones, altogether making the little one a gruesome picture indeed.

I had requested the father to allow me the privilege of an autopsy, which he did. Because it revealed the futility of it all, I

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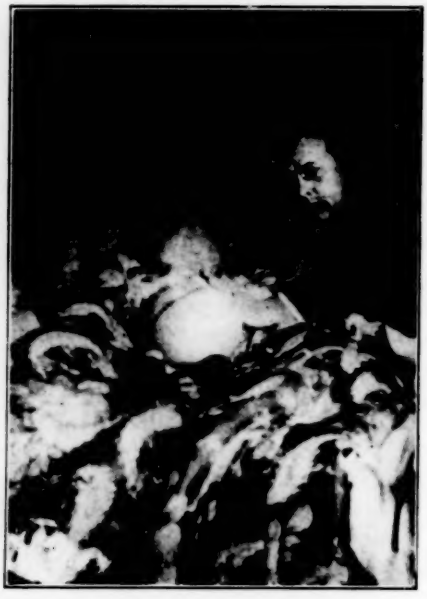
have not given in detail every step in the management of the case. The autopsy showed the tumor to be adherent to the descending colon and some coils of the small gut. A little dissecting made the revelation that it was a tumor of the kidney and not of the spleen, which normal in size and apparently healthy, was lying in contact with it. The upper third of the right kidney was white and swollen, but no involvement of glands or other organs was discovered.

The tumor weighed one pound and fourteen ounces, was encapsulated and smooth, except for two protuberances on the under



surface, each about as large as a split lemon. It proved to be a small, round cell sarcoma.

It is only fair to say that a number of excellent men saw the case with me, all called the tumor enlarged spleen and some advised operation.

The lessons which this case teach, and which seem to me to make its report worth while, are:

First—Sarcoma of kidney in the infant may attain great size before any symptom of it is observed.

Second—Physical examination may be very misleading in diagnosing abdominal tumors. In this case the two protuberances formed a notch, which exactly simulated the splenic notch. *Butler says:

—"Diagnostics of Internal Medicine," Second Edition, Page* 512.

"If in doubt as to whether or not a tumor in the left renal region involves the kidney and is not an enlarged spleen, the position of the descending colon should be ascertained by percussion, inflating it if necessary by pumping in air through a large catheter or colon tube. If the colon lies in front of the tumor it is renal and not splenic." In this case the colon was not in front of the tumor. This was demonstrated at autopsy.

Third—A careful microscopic examination of the blood may be misleading, as the blood picture of almost any one of the anemias may be present secondary to malignancy.

Fourth—Blood was not macroscopically present in the urine at any one of the many times that I examined the napkins. A microscopic urinalysis should have been made, which would possibly have led to a correct diagnosis.

Fifth—The undisputed temporary beneficial effect of sodium caccodylate is suggestive.

Sixth—An operation should have been done as soon as the tumor was discovered, though I believe that it was even then too late to save the life of the infant by operative procedure.

PYLOROSPASM.

Dr. W. M. Taylor, Oklahoma City, Okla.

Both the condition of which I speak, pylorospasm, and the one very closely allied to it, namely hypertrophic pyloric stenosis, may be designated under the caption of partial stenosis of the pylorus. Complete stenosis or atresia is rare and this discourse does not touch on it.

The two conditions of hypertrophic pyloric stenosis and pylorospasm according to Pfoundler's idea, stand in a close genetic relation to each other, but practically they are very different. The case which I shall report is one of spastic stenosis, but the two conditions being so closely allied I shall also briefly go over the subject of the organic or hypertrophic pyloric stenosis.

Probably a case of pure hypertrophic pyloric stenosis never recovers except relieved by an operation; but on the other hand, a case of pylorospasm rarely ends in death.

According to those who have had opportunity to observe this condition surgically, there is a hypertrophy of the circular muscular fibers about the pylorus; also, to a lesser degree, of the longitudinal ones producing an enlarged pylorus varying in size form a hazel nut to a hickory nut. This tumor is frequently palpable if patient is anesthetized.

Resulting from this condition there is a narrowing of the pyloric opening with often a compensatory development of the muscular

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coats of the stomach, due to the effort on the part of the stomach to force food through a narrow orifice. In others there may be a thinning of the muscular coat and dilations; the stomach border reaching down to the umbilicus.

The symptoms of pylorospasm are those of the hypertrophic pyloric stenosis, except they are not so pronounced and recur after intervals or little or no disturbance, but may follow errors in diet or any acute irritation of gastric mucosa.

In hypertrophic pyloric stenosis the vomiting comes on usually, earlier in life. More frequently in breast-fed babies. Dr. Graham, of Philadelphia, reports a case of pylorospasm ending fatally in a boy six and one-half years old. The vomiting occurs soon after every feeding; or, at times a feeding may be retained till a second is taken and then all vomited together.

The vomitus is free from bile and is usually forcibly ejected; abdomen is sunken and epigastrium prominent. The other symptoms are those due to vomiting.

Spasmodic pain is nearly always present. It was constantly present in my case, the child being old enough to designate location of pain. The child shows rapid effect of loss of bodily fluids.

The contractions of wall of the stomach, or the peristaltic waves, from left to right may be seen even when the child is quiet and for some time after food has been given.

Now if we have these symptoms, though in a mild degree, gradually subsiding, followed by periods of apperently no disturbance, and setting in again usually accompanied by digestive disturbance, the clinical picture looks to be that of the spasmodic type.

At the beginning we cannot always distinguish the one from the other; but by careful management and observing the history and course of the attack we should be able to distinguish them in time to follow the proper line of treatment which in the one is medical; in the other, surgical.

HISTORY OF CASE.

Rudolph K...., two years old; mother healthy, father very nervous temperament; general condition good, weight at birth, eight pounds. Was breast-fed till one year of age. Has always been well except for attacks of vomiting of various periods of duration even while on breast milk alone. These attacks came on lasting for perhaps one or two days in which some feedings were retained, others vomited with apparently little distress, but not entirely free from pain.

At the age of fourteen months baby had an attack of vomiting and in the vomitus rice, undigested was found, which had been fed thirty-six hours previous. With this attack he had some diarrhoea

and slight temperature lasting one day. Minute doses of calomel were given and absolute rest for stomach prescribed. No other prominent symptoms present except pain in epigastric region. This attack subsided, but at times for several days vomiting followed taking of food even though a very light diet was prescribed.

Several periods of slight indisposition occurred following this for I was consulted over the phone only; always these attacks were associated with vomiting.

On February 8, after being fed an unusual amount of breakfast he began vomiting, which continued at intervals of every few minutes for the whole day, and always immediately following the taking of water. This continued for twenty-four hours, after which the vomiting was not so frequent but continued the taking of liquid. The vomited material was very acid but contained no bile. In character the vomiting was not projectile as is often described in these cases, but came up as though regurgitated at times. He complained of pain before each attack of vomiting. The bowels moved three times during the second twenty-four hours, consisting of dark green mucus. Physical examination showed a well developed baby—fontanelle normal—heart and lungs normal and reflexes normal.

On the third day condition about the same, except that emaciation was beginning to show. The stomach could be well outlined and wes decidedly enlarged. Hypogastric region soft and flat, apparently empty. Dr. Horace Reed saw the case with me at this time, and after giving baby two ounces of water then blowing the breath gently over or flicking the skin over the stomach, the peristaltic waves from left to right were seen very distinctly first preceeding the vomiting of water, which followed in a few minutes. These same contractions were seen when the child was quiet. This symptom was seen on several occasions afterwards.

Pain was quite constant for three days, complained of especially just before vomiting, which was usually followed by a period of relief and sleep.

No tumor could be made out over the pylorus. I did not anesthetize the child for making the examination. Temperature was never over 100½. On third day bowels only moved following enema.

The symptoms and physical signs connected with the history point in a fairly clear way to a pyloric obstruction. Now the question is whether the condition is that of a true pyloric stenosis or a spasmodic stenosis? The symptoms of the two conditions are very similar, but, usually of milder type in pylarosposum.

The differentiation is difficult and Pfaundler says the differences in many cases are in degree only; yet the symptoms of pyloro spasm appear for the most part with digestive disturbance or accompanied by them and intermit in a very decided way. Simple

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pyloric spasm never ends in death. So the history and course of this case bear out the same conclusion.

The duration of this recent attack was four days, after which the symptoms gradually subsided under the following plan of treatment:

All liquids by mouth were suspended. High saline irrigation, 4%, were given every four hours and effort made to have water retained as long as possible. He seemed to take this saline up as though he were a sponge. The urine was increased in quantity, child more comfortable and vomiting becoming less frequent. Hot applications over the epigastrium for the pain which he complained of considerably.

The first nourishment after vomiting subsided was peptonized milk diluted to one-third strength with a thin barley water in amounts of one ounce at three hours intervails. This was increased in strength as the child's condition improved.

Since this attack which occurred in February of this year, he has had two mild attacks of vomiting lasting perhaps twelve hours. But, with prompt treatment and withdrawal of all food, both have quickly subsided. I find that this particular child seems to have less trouble by feeding him at three-hour intervals and, of course, by this plan lessening the amount of food at each feeding.

I believe in the etiology of this condition—that of pylorospasm—in this particular case, history, symptoms and course will bear out the belief that we had to begin with a narrowing of the pylorus of a rather mild degree; and that whenever gastric irritability was produced by digestive disturbances we had the evidence of pyloric spasm.

It has been pointed out by several observers that the hyperacidity which was always present in this case may be another element in producing pyloric spasm.

Two of the German observers advocate the rectal injection of saline solution by the drop method, thereby not only supplying the lost fluids to the tissues, but for the reason that the sodium chloride taken up lessens the secretion of the acid in the stomach.

I feel that pylorospasm is not a surgical disease, at any rate until other therepeutic means have been carefully tried.

Hypertrophic pyloric stenosis is surgical, and when diagnosis is clear operative relief is the only one which promises anything and it should be performed early before the child is exhausted.

The choice of operations with the majority of operators seems to be posterior gastro-enterostomy and pyloroplasty.

PREVENTIVE GYNECOLOGY.

A. B. Leeds, Chickasha, Oklahoma.

In this discussion, the merits or demerits of any particular operation will not be discussed, neither will surgical intervention as a relief for gynecological conditions be decried, but rather consideration will be given to the value and benefits of the prevention of these conditions which so often unrecognized, progress until prompt and heroic surgical intervention alone offers any hope and frequently that is of no avail.

A few of the difficulties of diagnosis and some of the mistakes frequently made and their causes will be casually mentioned so that perhaps a timely lesson may be drawn from this discussion.

The brilliant results obtained, in the last few years, in the field of preventive medicine and surgery is not only a credit but a living monument to the untiring efforts and heroism of our profession.

Yet, as great and perhaps as fertile field of usefulness is the one suggested by the title of this paper.

Following the advent and thorough understanding of asepsis and antisepsis, it was but natural that our efforts should be in the direction of the surgical relief of gynecological conditions, up to that time, practically unknown and little understood.

As a result of our efforts, in this direction, not only was a vast store of useful knowledge obtained, concerning the results of many pathological conditions, heretofore vaguely guessed at, but there was developed an insistent inquiry as to the cause of these different conditions.

Having to consider not only the intricate arrangement of these organs themselves and their intimate association with the rest of the human economy but also the effects of environment, daily and perhaps hourly influences, as well as our complex civilization upon the usual physiologic changes and epochs, we were confronted with a complexity, in the ills of the sexual organs and life of woman, that, at first sight, was appalling.

But, let it be said to the credit of our profession, that the task of unraveling this tangled skein was undertaken with that spirit of acknowledging no defeat which is always rewarded with results.

In the elaboration of our technique and the investigation of the etiology of these conditions, many interesting facts have been enunciated.

Some of these facts which will be mentioned are pertinent and frequent sources of error and not being thoroughly understood, act not only as a hinderance to the prevention of these conditions, but also mar and modify an otherwise intelligent conception of the treatment and case at hand.

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With a not entirely rational conception of the sensorial manifestations of the diseases of the female sexual organs together with an added difficulty from the direct sensation of pain being lacking and the pain often being reflected from an initial source of irritation, we have a fruitful field of very difficult and often impossible diagnosis.

Often a thorough and careful examination will show that a pain in the hip-joint or knee-joint has been frequently reflected from an irritated or inflamed nerve or nerves in the ovaries or uterus and this is not strange when we consider that the sacral ganglion and the lower lumbar ganglion of the sympathetic nerve are connected with the great sciatic nerve and partly with the obturator and these same ganglion likewise are connected with the nerves proceeding through the broad ligament to the uterus and ovaries.

In the true pelvis, we often find the cecum and frequently when it is distended with gas, we have vague pains which are mistaken for signs of ovarian cysts and kindred ailments.

Yet further away, we occasionally find that a painful anal fistula and its resultant abnormal distention of the clon and cecum, with gas, often gives signs and symptoms which are mistaken for ovaritis, appendicitis and in older women, for cancer.

Functional disturbances and the more obscure sexual neuroses, together with the proximity of the appendix and sexual organs and their proneness to inflammation calls for an ever vigilant care in considering these cases.

A contrast of the many unnecessary operations that can be avoided, by a correct location of the pain in the lower abdomen, in hysterical women, with the unexpected pathological conditions of a serious nature demonstrated, frequently, by an operation, in young women who have been treated by their parents and physicians as hysterical, demonstrates an urgent need for extreme watchfulness in these cases.

Often the etiological factor of mental disturbance as a primary cause of many of these conditions is either overlooked or not given the consideration it justly deserves.

The promulgation and enforcement of our wonderful sanitary laws for the benefit of public health is accomplishing great good, but as great and equally important benefit could be obtained by a rational teaching and training of the young girls as to the effects of not only the necessary physiological changes, but also the untoward results of pathological conditions due to their neglect and abuse, of the young women as to the woes saved by the correction of irrational habits and practices; of the women as to the benefits of a compliance with intelligent instruction of the physiologic results of married life and the importance of a careful and common-sense handling of the pregnant women also the devastating effects of the preventable

accidents of the puerperium and the scourge of gonorrheal and venereal infection.

Will not our consideration and treatment of the female organism, so complex in nature, be rational and ideal and will we not hasten the intelligent preventation of many of these conditions, if we give these cases the same consideration the piano tuner gives the piano, with its multitudinous parts?

He first considers the exterior, sees if the frame or case is level and well balanced, takes careful survey of its surroundings, as to exposure, climate, usage and the demands which will be made upon the instrument, its age and the probable care that will be given this complex mechanism, and then gives his advice accordingly.

Then carefully and cautiously he begins the examination of the interior or vital part. First, the sounding board or frame work, then the keys, springs, key-board and pedal action and finally he undertakes the principal task, that of regulating the tension of each individual string.

How often and how thoroughly he considers each string from every phase; from one he takes a small piece, from another a larger piece and another he lengthens out, then a new string is given the place of an old one, worn and weak.

Finally with every string at just the right pitch and tension, he begins to harmonize the chords so that eventually there is perfect harmony and not a suspicion of a discord.

One piano is easily tuned, just a slight change here and there, and with a little timely advice this trouble will be prevented from occurring again; and with another, it has to be patiently and laboriously practically rebuilt and frequently not satisfactorily.

The classical music, with its rich perfect harmony, wears the piano the least, while the harum-scarum rag-time music jars the very life out of an instrument.

Does not the harmonious, satisfied, contented and healthful living with all its lack of discord, wear out a woman the least, while what does the harum-scarum rag-time way of living, first this way, then that way, do for the life and health of a woman?

Is not a great similarity instantly apparent between the homely comparison of the piano and woman?

Which gives his complex organism the most consideration?

Do we?

An elderly lady, whose hair was sprinkled with gray, and whose every movement demonstrated an even poise and well balanced system sat playing an old piano, whose very case showed an elegance and richness and whose pedal action, keys and tone of the strings showed that time had dealt kindly with these two.

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And from the combination of the two, there resulted the sweet, even and soft melody, the gladness, pathos and harmony that brought peace and contentment to the hearers.

Shall we, in obtaining our diagnosis and pursuing the treatment of these cases, remember this illustration and consider well the symptom-complex, the family and personal previous history as well as the physical signs so that like the piano tuner we will have done our work, in each individual case, well.

THE TREATMENT OF CONSTIPATION.

F. L. Hughson, M. D., Vinita, Okla.

The one subject that interests the physician more than any other, and one which we as physicians and surgeons come in contact more frequently is constipation. It is found everywhere, in all countries, about alike, and is a vexing subject to practicioners in the young as well as the old. While it seems to be a simple thing, and a condition that is easily overcome temporarily, yet its treatment to perfect a cure, is by no means an easy one. Its causes are so varied among the masses that its difficulty in diagnosis, as to the causes, in different individuals becomes more and more apparent, and it may even exist without a cause. It may be inherited.

It will be very difficult to get this before you without first giving a short anatomical description of the organs involved, and no physician can treat a case of constipation without knowing the intricate parts of the alimentary canal, and especially the lower bowel and rectum. The small intestine is twenty feet in length, and holds about twelve pints. Has four coats, serous, muscular, sub-mucous and mucous. In the mucous coat we have the Goblet cells, Brunner glands, Crypts of Lieberkuhn Villa, Valvulae Conniventes, Solitary glands, and Peyers patches.

All of these have their special parts to play in the all-important act of digestion. From the Illeo-cecal valve to the Anus is that part called the large intestine. Its length is about six feet.

It is larger than the former and has thicker walls, sacculated contour, and has peculiarlly arranged longitudinal bands. It is in the large intestine and the rectum that we find the causes for constipation. The loss of the constricting power of the circular fibers in the sacculations or cups. The almost right angles that the bowels make at the flexures, the hepatic, splenic and sigmoid. The changes in tissue formation at the juncture of the descending colon and the rectum, the folds, or valves, as they are more properly called, of Houston, and last, but not least,are the different diseases peculiar to the rectum, as hemorrhoids, fistulas, fissures, ulcers, etc.,

which cause so much distress at defecation, that the patient puts off the desire until there is no more sensation of feces in the rectum.

There are many causes for constipation, among the most important are dislocations of the intestines, either congenital or acquired, causing kinks or flexions, these kinks are often caused by the accumulation of fecal material in the colon and may be the cause of complete obstruction. An intermingling of inhibitory and accelerating nerves are found in the circular muscles of the bowels, and as a bolus comes in contact with the sacculated portion, the muscles immediately below the bolus are inhibited or relaxed, while those immediately above are accelerated or contracted, thus by force of the muscles the residue is carried down through the bowel thus if the nervous system is at a low ebb, and improperly fed by the accompanying blood vessels the inhibitory and the acceleratory nerves are weakened in function and their movements retarded, and constipation results, also as the food passes through the small intestines it loses a greater portion of its watery substance until in the form of feces it reaches the sigmoid flexture; now if the contractility of the muscles in the lower bowel and rectum is in any way weakened constipation results. Of the minor causes I will name a few, as tea drinking, too little water taken into the system, a lack of exercise, causing weak abdominal muscles; a deficient secretion of bile. It has been my observation that a diet of meat and eggs will eventually cause habitual constipation, as it is nearly all converted, leaving so small a quantity of feces, a retarded peristalsis, improper food, incomplete mastication of the food, indifference to the calls of nature, nervous influences, or a diseased nervous system, a continuous use of some drugs, and local obstruction.

Now the descending colon receives its nerve supply from the sympathetic chain, which starts from the spinal cord, in the lumbar nerves, and thence to the mesenteric ganglia, from this by fibers running to the hypo-gastric nerves and plexus, these are inhibitory nerves.

The motor nerves leave the cord from the second to the fourth lumbar, and enter into the pelvis plexus. These control the same as above.

It is upon the sensory nerves that the undigested food, together with the debris and secretions from the alimentary tract, produce the sensation and desire to defecate, although other pathological conditions may cause this same desire. An inhibition of these nerve sensations is a great factor in the cause of constipation. Then we have the rectal valves, or valves of Houston, these are oblique, semi-lunar folds projecting into the lumen of the bowel and it is in these valves that a residue of feces gather and are another great factor in the cause of constipation.

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The principal symptoms are headache, malaise, muscualr weakness, giddiness, mental depression, insomnia, bad temper, alternate attacks of diarrhea and constipation, etc.

As a rule, there is very little attention paid to a case of constipation, until some complication sets up and then a patient realizes that something must be done. Only a few days ago a patient came into my office for treatment, her bowels had not been evacuated for over a week, and she was not alarmed about that, as she said it was a common occurrence, she going for days at a time without a bowel movement. Now these things all lead to fistula, proctitis, hemorrhoids, or ischio-rectal abscesses.

From the great number of cases of chronic constipation among those suffering from psychical disorders, such as melancholia, neurasthenia, etc., it is evident that the central nervous system exerts more or less influence over the motility of the colon. In the treatment of this trouble one must observe regular habits, retire at a certain hour, eat his meals regularly, take a certain amount of exercise, the best time to do this is upon rising in the early morning, before breakfast, and the regualr attendance upon the calls of nature immediately after eating breakfast. If no attention is paid to a constipation, a catarrhal condition is soon set up in the mucosa of the intestine, after this catarrhal condition becomes somewhat stationary, we have a hypertonicity of the musculature of the intestine, this is what we call a spastic constipation, spasm of the transverse colon occurs causing a retention of feces, with resulting fermentation, colic follows, and in severe cases large amounts of mucous are passed. In this form the stool is of small caliber, and at times ribbon-shaped, the patient complains of violent contractions of the intestines with a mucus diarrhoea, we now have an absorption of sulphereted hydrogen gas, or fecal ptomaines, it is through the absorption of these toxic products that causes the many symptoms such as headaches, temporary loss of memory, or convulsions. Whenever we have the feces passed in hard masses covered by a layer of flaky mucous, we then have an irritation of the mucous membrane, somewhere in the colon and when the irritation is severe then we have alternate attacks of diarrhea and constipation.

In all kidney symptoms and where I think it necessary to make a test of urine, I regulate the bowels before securing the urine, as I have found that pathologic urine may be the result of toxic actions from poisons generated in the intestines.

I have found that the prescribing of drugs, such as anti-constipation compounds and intestienal tonics are all unsatisfactory in the treatment of constipation. You may relieve the bowel of its contents only to have to repeat it in a few days. I do not approve of purging the bowel in this trouble, but there are times that one stool a

day is not enough to secure a clean bowel, it may move off the principal part of the contents, but the valves in the rectum may be filled and may not be emptied until a thorough purge is given.

There are a great many patients who come to us for treatment, who have taken laxatives so long that only the most drastic purgative will make any impression whatever, not having a bowel movement once in several days, their entire system overloaded with retained poisons, auto-infection plainly written upon their countenance, and their general resisting power so lowered, that they readily become a prey to any one of numerous diseases. They have gone from one physician to another, usually to be given the same form of treatment, a drastic purging of the colon.

It is on this account that so many of our patients fall into the hands of osteopaths or chiropracts, simply a neglect of one of our greatest curative methods, massage. This has done more to build up those fellows, for they get results and especially in these cases of chronic constipation. A lapse of physiologic function always precedes the onset of most infectious diseases, the bowel movement has not been frequent enough to carry off the poisons naturally eliminated through that avenue, and not only the infectious diseases but a great many of the skin affections, which invariably are relieved by a thorough cleaning out of the alimentary canal.

Ebstein recently reported subsidence of symptoms of exophthalmic goiter in four cases under treatment of chronic constipation by means of large enemas of oil. He is convinced that auto-intoxication from chronic constipation has an injurious effect on the thyroid, and when the source of these toxins is dried up the symptoms subside.

In a case of atonic constipation, where the normal muscular force is lost, there is a lack of normal irritibility, in these case mechanical treatment is often best, but better to use an oil injection before beginning massage, then knead the bowel the entire length of the colon, the oil loosening up the scybala, penetrates and softens them, then follow with an enema of hot water and soap if the bowel is not moved freely without it. I am not a believer of the daily use of the enema. I have seen a great deal of harm result from its daily use, a thorough massage of the liver is also good, as it stimulates the bile ducts to action and causes a free flow of that all-important secretion, the bile. The chief feature of the massage is not to expel the contents of the bowel, but to stimulate peristalis by mechanical irritation. Inability of the bowel to empty itself depends on a disturbance of some part of the mechanism of defecation. We may have a constipation due to a lesion of the mucosa of some part of the canal, as in a chronic catarrh of the intestines, we do know that we have this condition due to the irritating effect of the impacted fecal masses upon the intestinal mucosa. In muscular insufficiency without an in-

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flammatory condition, stimulating treatment is indicated, strychnine, quinine and a general tonic treatment.

A glass of water immediately upon rising in the morning, is a great thing for some people, as I have said before, one of the greatest things in the cure of constipation is the establishment of regularity of the bowel movement, an attempt at exactly the same hour every day to evacuate the bowels even though at first unsuccessful, followed up persistently, will form a habit. The electric vibrator is a much used instrument at the present time, but care must be taken not to dwell too long over the same area, the applicator must be kept moving in small circles along the line of the colon from cecum to rectum, repeated eight or ten times, too long stimulation over one area will retard peristalsis.

We often find young children with whom castoria, caster oil, and daily enemas have been used until the rectum has lost its tone, and the medicine given has no effect any longer, we give a few grains of calomel in broken doses, which move the bowels but only temporarily, if this is not kept up from time to time, auto-intoxication takes place, thus setting up a serious condition ending in an attack of vomiting, high fever and cholera infantum, and death. The season is fast approaching when the most serious results follow the above named conditions. Exclude milk from the diet, use sugar and butter on the cereals, which should constitute the principle foods. A child four or five years old may have raw and cooked fruits, baked potatoes, poultry, etc. On several children I have found it expedient to use olive oil treatment, using as much as an ounce placed in the rectum through a rubber catheter, eight inches in length. This I would do each night, carrying this procedure out for at least two weeks or a month or until I felt sure the child was cured, which usually took that length of time.

A person suffering from constipation should drink eight or nine glasses of water a day, or plenty of buttermilk, fruit juices, etc.

As a diet I would recommend the following: corn bread, graham bread, most any vegetables, prunes, apples raw or cooked. Avoid pork, eggs, milk, pastries, cakes, tea, etc.

As a great help in the treatment of chronic constipation, I would recommend a pint or two of hot water with a teaspoonful of common salt to the pint, to be taken the first thing in the morning on an empty stomach. Sip it from a spoon, take your time, but have it hot. I have found phenolphthalin one to eight grains on retiring to act nicely.

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DR. FISHMAN'S BERLIN LETTER.

Berlin, Germany, September 27th, 1912.

Since the time medical science has been placed upon a more or less rational and scientific basis, particularly with the advent of pathological anatomy, the strides have been rapid with an accelerated degree. Within the more recent years, the newer discoveries in all branches of fundamental sciences have at the same time carried with their development, great advances in clinical aspects of diseases as well. And this is the aspect in which we are most interested.

The true sciences which are associated with medicine, such as anatomy, chemistry, etc., cannot change to a very great extent, except in-as-much as the bearing they may have upon clinical medicine will induce workers in these branches to look at these fields from a new veiw-point. The associated sciences have on the other hand, made great progress. The study of pathological anatomy is continued with great eagerness and any point which might influence a clinical advance is quickly followed up and studied most minutely.

Physiological chemistry, because of its influence upon the study of the less-known diseases, belonging to the group of general metabolic diseases, has particularly shown great advances. For example: The study of the chronic joint affections, gout and adiposity is gradually being placed upon a plane where it is necessary to know much of the patient's excretory and secretory powers in order to study the individual caes from a rational point of view. These diseases of metabolism when properly classified and rationally treated by physiological methods respond splendidly to treatment.

It is surprising to see to what extent the X-Ray is being used in the diagnosis of internal diseases. Sometimes, in the clinics, one imagines that diagnosis is never established without showing an X-Ray picture of the case or part in question, and as a matter of fact, the aid that a well-taken and well-interpreted Roentgen picture will give to a case is absolutely invaluable.

An apical tuberculosis is distinctly visible by flurscopic examination, while the physical signs are found still uncertain by any of the known methods. A patient is transilluminated for many other chest conditions. The location of the heart, its size, form, etc., are determined accurately and promptly by this means and in large hospitals, it is used almost as a routine measure, the various chronic valvular diseases are easily recognized by the size, form and location of the heart as seen through the fluroscope. Upon the radiographic control, the older methods of precussion have been entirely superseded by a newer and much more accurate one.

The greatest advances in this aid to diagnosis have been in stomach work. It is astounding to note how much can be learned of the actual anatomical and pathological condition in the gastro-

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intestinal track by means of the X-Ray. In the diagnosis of intestinal conditions, there have been rapid strides. The functional tests for intestinal digestion are particularly interesting, in-as-much as they are rapidly bringing the classification and treatment of intestinal affections upon a basis that is purely rational. Therapeutic results in this way have improved correspondingly with the betterment of the minute diagnostic points and the development of a clearly understood Intestinal Pathology is well under way.

In infant feeding, Finklestein's casein milk has become very popular and the results in his clinic are exceedingly good. It is a marked improvement upon the older point of view in which the proteid was reduced to a minimum because of its supposed toxic effect upon the child and the deficiency in this food-stuff was made up by increasing the fat content, much to the detriment of the patient and to the preplexity of the doctor. In this newer method the pendulum has swung far over to the opposite side. It is, however, true that children fed upon this mixture get along exceedingly well and most of them not only take on weight, but improve in general as well. Much attention is paid to the stool of feeding cases and the food formulae are controlled almost exclusively by the findings therein. In the matabolism of children, careful study has taught the use of the value of the salt contents of infant food mixtures so that attention to modification in this direction is also associated with improved conditions.

In some of the surgical clinics local anaesthesia is the rule, no matter whether it is simply a finger amputation or a major laparotomy. The hypodermic needle with the cocaine derivatives are always in evidence, and it is not unusual to see many successive major operations without a single case in which a general anaesthetic is used. The personal feelings of patients in the European clinics is not as carefully considered as is in our country. This accounts for a certain amount of the widespread use of local anaesthesia in these clinics. In urinary surgery the use of the urethral catheter with the functional renal tests are constantly being used and considerable is learned from these methods of examination. Together with the X-Ray, these diagnostic investigations upon the urinary tract reduce the errors in kidney diagnosis to a minimum.

The Wasserman test is being used to a greater extent than ever, not only for the diagnosis of luetic conditions particularly in medicine, but also to determine the stage of syphilitic infection and as a control on the treatment of this disease. The present state of the therapy of syphilitic conditions, I shall reserve for future communication. Prof. Lange of the Weichelman Clinic has recently introduced a new test for cerebral spinal fluid, by means of colloidal gold. He claims to be able to differentiate an early from a late syph-

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ilitic infection as well as to establish the specific diagnosis by this method. This test has great possibilities and with his abundant material it will soon be placed upon a working basis or be entirely discarded. The results of his investigations are being watched with great eagerness.

The progress in serum diagnosis along other lines and the problems in immunity are being given considerable attention and much is hoped for in the way of specific therapy as a result of these investigations.

C. J. FISHMAN.

THE OKLAHOMA RECIPROCITY AGREEMENT.

The State Board of Medical Examiners of Oklahoma and the State Board of Medical Examiners of the State of New Mexico Do Hereby Agree to Reciprocate Medical Licenses upon the Following Basis:

RULE NUMBER ONE.

Art. 1. (a) Each of the Boards agree to recognize licenses or certificates issued to practitioners of medicine, in Oklahoma subsequent to November 16th, 1907; in.....subsequent to....., upon a basis of a written examination in subjects stipulated in their respective laws, subject to the following provisions:

That the applicant must meet every requirement as to preliminary education.

That the applicant must be a graduate of a college recognized as in good standing, upon the date of his or her graduation, by the Medical Examining Board of the state in which reciprocity is asked.

That the general average of the applicant, attained in said examination shall not be less than 75 per cent, and not less than 50 per cent in any one subject, and it is further agreed that the latter per cent shall not be accepted in more than one subject.

(b) The various subjects which may be included in the above may be arranged by either board to suit its convenience, provided that the answers shall be rated upon a scale of one hundred for each subject.

(c) If subdivision (a) of this article should fail to include one or more subjects stipulated in their respective laws, each Board reserves the right to require a supplementary examination in said subjects and the rating awarded thereon shall be added to those attained at a former examination in their respective states in order to determine the general average. This provision refers and applies to such subjects as upon which the respective laws may not be uniform.

(d) It is further agreed that no one legalized upon examination within the above limits, or within any other period, as an undergraduate, who is still an undergraduate at the time of making application for reciprocity, will be endorsed or accepted.

(e) It is further agreed that applicants are not eligible to reciprocal privileges unless they have practiced for at least one year immediately preceding their application, in the state from which they desire to reciprocate.

Art. 2. An applicant applying for reciprocal recognition by either Board shall execute a written application upon the official form adopted by the Board and all particulars therein required must be verified and certified to the Secretary of the Board issuing the original certificate. The applicant shall also file a recent photograph of himself together with a certification of good moral character, professional standing, and identification signed by the President or Secretary, or both, of the County or State Society in whose jurisdiction he may reside.

Art. 3. All applicants for reciprocal recognition by either Board shall be required to make a sworn statement of the number and date of each examination taken by him prior to date of his reciprocal application, together with the ratings obtained thereon at each; also a statement as to all places where he has practiced, the character of the practice engaged in, (general, special, or itenerant) and the length of time so engaged in each and whether or not any certificate issued to him has ever been suspended or revoked.

Art. 4. All applicants for reciprocal recognition must conform to the legal requirements in force in the reciprocating state.

Art. 5. Each Board shall make an annual inspection of all medical colleges within its own jurisdiction and determine the standing thereof, but the right is reserved by both to inspect or investigate all medical colleges, and if necessary to cite evidence why the Board in whose jurisdiction such colleges are located should revise its findings.

Art. 6. No medical college located within the jurisdiction of either Board party to this agreement, shall be recognized as in good standing by the other until so declared by the Board having jurisdiction.

Art. 7. In order to obtain recognition by either Board party to this agreement, medical colleges must conform to the schedule of minimum requirements pertaining to college curriculum and equipment, and to the requirements pertaining to the preliminary educational qualifications of applicants for admission to the medical course, prescribed and adopted by the American Confederation of Reciprocating, Examining and Licensing Medical Boards, and the National College Organizations of represented schools upon respective Boards.

QUALIFICATION NUMBER TWO.

Reciprocity under this rule will be subject to the discretion of the Reciprocating Committee of respective Boards, strictly. The application of all belonging to this class, in addition to the endorsement provided for in the customary application blank, must secure and attach to application a personal endorsement of the Secretary, President, or some one member of respective Boards, as to personal

morality, integrity and all-around professional desirability and fitness.

The foregoing agreement, executed in duplicate, shall be in full force and effect on and after the date of signing of the Presidents and Secretaries of the respective Boards, and may be cancelled by either Board at the expiration of thirty days after written notice thereof by either Board party thereto.

EDITORIAL

ETHICAL BEHAVIOR.

We occasionally receive letters asking an opinion as to the ethics of certain acts of physicians and to properly answer such letters requires for interpretation a knowledge of existing conditions.

Ethical conduct may be said to be the conduct of the rank and file of the physicians of that particular community and any unusual departure of action from the usual action of physicians of that neighborhood by a physician may be properly called unethical. For instance, in certain portions of the state it is perfectly proper for physicians to carry the small professional cards in their local papers, but it is improper to do so unless most of them do likewise. It is certainly improper for a physician to countenance the writing up of operations and cases in his local paper without reference to the custom prevailing. It is wrong to do so, even if it is generally practiced, which is usually not the case.

Some members of the medical profession have a mania almost for publicity and seek it at every opportunity and oft times they are simply unfortunate in their lack of taste and good breeding and their ignorance of propriety and more can be done by gentle raillery from the hands of their professional brothers than by any other method in the cure of this class.

It may be taken as a safe rule that whatever one hesitates to do in the presence of his brother physician he certainly should not do under other conditions and it should be a constantly remembered rule to make no statement of a physician to the laity unless it be carefully weighed and then it might not be forgotten that a statement by a physician is subject to more distortion than can be imagined. A statement concerning prior treatment by another physician to a patient is probably subject to more misinterpretation than all others, due solely to the fact that it is often impossible for the patient to understand the conversation and remember to repeat it properly afterward, so they had best not be made if one is apprehensive of the result. A case is on record where a patient travelled from Kansas City to St. Louis consulting an oculist, the report

stating that the St. Louis physician told the man that his Kansas City physician had ruined his eyes. The man went home, hunted up his former physician and murdered him—an outcome probably the result of a careless remark.

The legal profession constantly remark on the jealousy in our profession and point to the comparative freedom of it in theirs. They overlook just this difference—they face their rivals and colleagues in open court and each act is subject to close inspection by the other side while ours is often made in the privacy of the office or the home. If we had more consultation and if our cases were subject to the close inspection of our rivals we would have fewer misunderstandings. This is well borne out by the almost universal rule that where physicians are thrown together the question of ethics rarely arises and they are nearly always close friends.

We might do well to throw away all our code of ethics and substitute the Golden Rule.

NEOSALVARSAN

This is the trade name for a new preparation of Salvarsan the result of experiment number 914 by the justly celebrated Ehrlich and has advantages over its predecessor which entitle it to immediate consideration by the profession.

Neosalvarsan dissolves readily in water at room temperature, forming a very unstable solution which may be readily precipitated if the water is not either distilled or thoroughly boiled or if it contains an excess of mineral salts. The water used should not be hot, but as above stated—room temperature. The resulting solution is neutral to litmus and is preferably administered intravenously and has the advantage of a great reduction in bulk, requiring only 25 Cc. of freshly distilled water for each administration. For intramuscular injection 3 Cc. is sufficient to form a solution and when given in this manner is said to produce none of the objectionable symptoms of pain and possibly sloughing as salvarsan sometimes did.

Observers are very enthusiastic over the action of this preparation and those syphilographers formerly using salvarsan have taken very kindly to the new drug.

THE DRUGS WE NEED

Under this caption Dr. Oliver T. Osborne of Yale Medical School delivered himself of some opinions at the Atlantic City meeting (see Journal A. M. A., September 28, 1912) which should deserve consideration at the hands of all physicians who prescribe drugs.

Disclaiming that he was a therapeutic Nihilist in any sense, he points out that many of the preparations or drugs we use are

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either inert in the quantities given or not as good as some other member of the same class and that there should be no second and third choice drugs, but we should use the best one every time the indications point to a need for it. The argument is one of the most sensible ever written and while, of course it was opposed by those who thought there should be no arbitary restriction, a deduction not warranted by close reading of the paper, yet the general ideas outlined are so good that they are almost undisputable.

The principal trend of the discussion of the paper was that it was necessary to teach the use of the different drugs in order to comply with the demands of many of the State examining boards and that the young physician had to be taught much that was not needed.

It is too true that we are being overloaded with drugs whose virtues are extolled often for commercial purposes solely and when tried are found to be useless or nearly so. There is too much of the detail man walking into the office and telling the physician about materia medica and too little of the physician making his own deductions from observation and study. A great many of the preparations left by the detail man have only one virtue, they are pleasant to take. Theoretically the tonic so universally used, iron, quinine and strychnine phosphate should be more active in a fluid preparation than otherwise, but one has only to use the pure drugs to be convinced of the fact that his own combination in dry powder is best and soon to understand that efficiency has been sacrificed for pleasantness.

A study of Osborne's article will cause one to believe that we can dispense with many of the drugs we use and get the same or better results by the process of elimination.

CONFERENCE OF STATE SECRETARIES.

One of the most important meetings since the reorganization of the American Medical Association, at St. Paul, in 1901, was the Conference of the Secretaries of State Societies, called by the Committee on Uniform Regulation of Membership, at the Association headquarters, Chicago, October 23 and 24. This committee was appointed in 1908, in accordance with a recommendation made in the Secretary's report for the year. At the Atlantic City session, last June, the committee summarized its reports for the last four years, and recommended that a conference of state secretaries be authorized to consider the entire question of membership conditions in the county, state and national organizations. This recommendation was referred to the Board of trustees and a conference between the committee and state secretaries was authorized by the Board of trustees, to be held at the same time as the October meeting of the board. Appropria-

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tions were made for paying the expenses of all state secretaries who attended the meeting. The conference was called to order at 10:30 a. m., Wednesday, October 23, at the Association building in Chicago, by Dr. Thomas McDavitt, secretary of the Minnesota State Medical Association and chairman of the Committee on Uniform Regulation of Membership.

THE ATTENDANCE

Thirty-eight states were represented, the roll showing the following in attendance:

Dr. W. W. Watkins, Phoenix, Ariz.
Dr. C. P. Meriwether, Little Rock, Ark.
Dr. Philip Mills Jones, San Francisco, Cal.
Dr. G. W. K. Forrest, Wilmington, Del.
Dr. W. C. Lyle, Augusta, Ga.
Dr. E. E. Maxey, Boise, Ida.
Dr. E. W. Weis, Ottawa, Ill.
Dr. Charles N. Combs, Terre Haute, Ind.
Dr. J. W. Osborn, Des Moines, Iowa.
Dr. L. R. DeBuys, New Orleans, La.
Dr. W. B. Moulton, Portland, Maine.
Dr. W. S. Gardner, Baltimore, Md.
Dr. H. D. Arnold, Boston, Mass.
Dr. Wilfrid Haughey, Battle Creek, Mich.
Dr. Thomas McDavitt, St. Paul, Minn.
Dr. E. F. Howard, Vicksburg, Miss.
Dr. E. J. Goodwin, St. Louis, Mo.
Dr. H. D. Kistler, Butte, Mont.
Dr. Joseph M. Aikin, Omaha, Neb.
Dr. Martin A. Robison, Reno, Nev.
Dr. D. E. Sullivan, Concord, N. H.
Dr. Thomas N. Gray, East Orange, N. J.
Dr. R. E. McBride, Las Cruces, N. Mex.
Dr. John Ferrell, Raleigh, N. C.
Dr. H. J. Rowe, Casselton, N. Dak.
Dr. J. H. J. Upham, Columbus, Ohio.
Dr. Claude A. Thompson, Muskogee, Okla.
Dr. M. B. Marcellus, Portland, Ore.
Dr. C. L. Stevens, Athens, Pa.
Dr. J. Perkins, Providence, R. I.
Dr. Edgar A. Hines, Seneca, S. C.
Dr. Perry Bromberg, Nashville, Tenn.
Dr. H. Taylor, Fort Worth, Texas.
Dr. W. B. Ewing, Salt Lake City, Utah.
Dr. C. H. Beecher, Burlington, Vt.
Dr. Grant Calhoun, Seattle, Wash.
Dr. Charles S. Sheldon, Madison, Wis.
Dr. W. H. Roberts, Sheridan, Wyo.

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No representatives were sent from Alabama, Colorado, Connecticut, District of Columbia, Florida, Kansas, Kentucky, New York, South Dakota, Virginia and West Virginia. No effort was made to secure the attendance of the secretaries of the Hawaiian Territorial Medical Society, Medical Association of the Isthmian Canal Zone or the Philippine Islands Medical Society, as these secretaries were too far removed from the place of meeting to make it possible for them to attend.

THE PROGRAM

The following program was carried out:

1. Call to order, Dr. Thomas McDavitt.

2. History and Development of Membership in the American Medical Association and Its Component Parts, Dr. F. R. Green.

3. Some of the Difficulties of the Present Situation, Dr. A. R. Craig.

4. Remedies Proposed by the Committee, Dr. Thomas McDavitt.

DISCUSSION

A general discussion of membership regulation was conducted under the following heads:

1. Fiscal Year. Should the fiscal year coincide with the calendar year? Should the fiscal year be the same in all county and state societies?

2. Should membership expire automatically at the end of the calendar year, and a new roster for each county and state society be made with the beginning of each year?

3. When should membership reports from county secretaries to state secretaries be due?

4. Should the dues of new members, joining after the first of the year, be prorated for the remainder of the year?

5. Should an admission fee be required in addition to the annual dues?

6. Should uniform application blanks, receipt blanks, and membership and transfer cards be adopted?

7. Should constituent state associations hold charters from the American Medical Association?

8. Should a uniform plan for the transfer of members be adopted?

In addition to the above Dr. George H. Simmons, editor and general manager, discussed the question of membership in the American Medical Association, and the changes in name proposed by the Board of Trustees.

REPORT OF THE COMMITTEE ON RECOMMENDATIONS

After two days' discussion it was evident that the secretaries

present were agreed as to the advisability of a uniform fiscal year for all parts of the organization, to coincide with the calendar year, and that they favored the expiration of membership at the end of each year and a complete revision of membership rolls at the beginning of each year. The committee on recommendations, consisting of Dr. E. J. Goodwin, Missouri State Medical Association; Dr. Wilfrid Haughey, Michigan State Medical Association; Dr. Perry Bromberg, Tennessee State Medical Association; Dr. William S. Gardner, Medical and Chirurgical Faculty of Maryland, and Dr. F. R. Green, secretary of the committee and of the Council on Health and Public Instruction, brought in a report recommending the adoption of provisions on these two points, and that all other points be deferred for further consideration. The report of the committee follows:

The Committee on Recommendations herewith submits the following report:

1. We recommend that this conference endorse the plan of having the fiscal year coincide with the calendar year in all parts of the organization. We further recommend that secretaries of all state associations which have not already adopted this provision bring this matter to the attention of their associations and recommend its adoption.

2. We recommend that constituent state associations adopt provisions making dues in component societies payable on January 1 of each year, and requiring county secretaries to report to state secretaries all members in good standing, together with their per capita assessment for the current year not later than March 31. State societies desiring to do so may provide a shorter period.

3. The recommendation regarding the third question under discussion is covered by our recommendation of the second.

4. Regarding the prorating of dues, we recommend that this be made optional with each component society.

5. Regarding an admission fee for membership we recommend that this be made optional with component societies.

6. While the committee recognizes, as a general principle, that a uniform system of blanks for county and state societies is desirable, as soon as practicable, we recommend further consideration of this question at a later conference.

7. We recommend that the House of Delegates of the American Medical Association be asked to consider the advisability of issuing charters to constituent state associations.

8. We recognize the desirability and advantage of a uniform method of transfer, but this system cannot be established until there has been developed a greater uniformity in other details of organization. We therefore recommend that this question be made the subject of discussion at a future conference.

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9. The committee recognizes the value of this conference to the state association secretaries, and to the purpose of organization; it therefore recommends that future conferences of this character be held.

The report of the committee was unanimously adopted by a rising vote. It was also moved and carried that the secretary be requested to send copies of the report to each state secretary and to each state journal, and that the proceedings of the conference, as published in the *Bulletin*, be furnished to each state secretary desiring them, in sufficient quantities to send one to each member of the state association. After a vote of thanks to the Board of trustees for making this conference possible by the appropriation, the conference adjourned.

PERSONAL AND GENERAL NEWS.

Dr. George A. Kilpatrick of Wilburton is in Boston doing special work at the Harvard Medical School and will remain there until January.

Dr. R. R. Smith, Muskogee, is in Chicago doing special work along Genito-urinary lines at the Alexian Brothers Hospital.

Dr. Fred H. Clark, El Reno, attended the meeting of the Mississippi Valley Medical Society at Chicago in October.

Dr. Millington Smith, Oklahoma City, attended the meeting of the Association of American Railway Surgeons and the clinics preceeding the meeting held in Chicago in October.

Dr. Claude Thompson, Muskogee, attended the meeting of State Secretaries held in Chicago, October 23rd and 24th and the Clinics of the city for ten days.

The many friends of Dr. J. E. Gilcreest of Gainesville, Texas, will be pleased to know that he recently successfully underwent an operation for gall stones and is now back at his usual work. While Dr. Gilcreest is not a member of our Association he is well known to many of us and especially to the physicians of the southern part of the state who will be glad to know of his recovery.

COTTON COUNTY MEDICAL SOCIETY ORGANIZED.

The physicians of the newly organized county of Cotton met at Temple on October 22 and made arrangements for a permanent organization. There were twelve of the seventeen physicians of the county present. Dr. M. T. Clark of Temple was selected as Secretary.

COLLECTION SCHEME OF THE LOS ANGELES COUNTY MEDICAL SOCIETY.

The secretary is in receipt of a set of blanks used by the Los Angeles, California, Medical Society for the purpose of assisting physicians in making collections. This scheme was put in operation in the California County some time ago and its practical workings proved so successful that a demand was made from all over the country for its details which are embodied in the literature sent out. This demand resulted in the printing of sample sets by the society and their distribution generally throughout the United States for the information of all who cared to use them.

MUSKOGEE COUNTY MEDICAL SOCIETY.

The first meeting of the Muskogee County Medical Society after the summer vacation was held October 14th with a very large attendance present.

The discussion of fees was a part of the evening program and a recommendation was adopted suggesting that charges for professional services be within certain uniform bounds.

Dr. W. D. Berry read a paper on hemorrhoids and demonstrated a modification of a pile clamp of his personal designing which has the advantage over the older designs of clamp in giving a uniform pressure at all points of the tumor within the grasp.

MEETING OF OCTOBER 28TH.

Dr. J. H. Stopler, Attorney for the State Commissioner of Charities read a paper devoted to and outlining the functions and powers of the State Commissioner of Charities and Corrections with reference to the inspection, control and examination of the different state institutions and hospitals. The paper was a clear statement of the methods used and the processes and results of the activities of his department.

Dr. H. M. Fullenwider read a paper on Mastoiditis covering the types, diagnosis and treatment of that affection. The paper was well discussed.

A committee of three was appointed to inquire into the workings of the collection plan of the Los Angeles County Medical Society, which plan in detail had been submitted to the society. The Committee was instructed to report at the next meeting.

Dr. J. C. Mahr, the State Commissioner of Health addressed the Payne County Medical Society on October 12th, at Cushing; on October 22nd an address to the Nurses Association of Oklahoma; on October 25th a public address before the teachers meeting at Shawnee on the subject of "Public Health in Public Schools," giving more or less attention to the medical inspection of schools.

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He delivered the principal address at Thomas, Oklahoma, on October 27th before the union meeting of the churches of that place who observed Tuberculosis day.

The American Surgical Association has appointed a Committee consisting of Drs. William L. Estes, South Bethlehem, Pa.; Thomas W. Huntingdon, San Francisco, California; John B. Walker, New York City; Edward Martin, Philadelphia; and John B. Roberts, Chairman, 313 South 17th street, Philadelphia to report on the Operative and Non-Operative of Closed and Open Fractures of the Long Bones and the value of radiography in the study of these injuries. Surgeons, who have published papers relating to this subject within the last ten years, will confer a favor by sending two reprints to the Chairman of the Committee. If no reprints are available, the titles and places of their publication are desired.

JOHN B. ROBERTS, Chairman,
313 S. 17th Street, Philadelphia.

INAUGURATION OF DOCTOR BROOKS.

The Journal acknowledges receipt of invitation to attend the inauguration of Stratton Duluth Brooks, President of the University of Oklahoma, on Monday, October Twenty-first, issued by the State Board of Education and the Faculties of the University.

MUSKOGEE MEETING OF THE BOARD OF MEDICAL EXAMINERS.

The State Board of Medical Examiners met in Muskogee for examination of applicants on October 7, 8 and 9th. The number of applicants was less than usually appear before the Board, but the class was said to be very high in attainments, etc. The meeting was one of the quietest ever held by the Board, as all trials pending before them were continued until next morning.

NEW BOOKS

INTERNATIONAL CLINICS, VOLUME THREE, TWENTY-SECOND SERIES.

Edited by Henry W. Cattell, A. M., M. D., Philadelphia, Pa., with the collaboration of Dr. John A. Witherspoon, Nashville, Tenn., and other American and European authorities, illustrated, 306 pages, cloth, price $2.00. J. B. Lippincott Company, Philadelphia and London, 1912.

This issue of the International Clinics is of special interest on account of a well written and illustrated article on the operative treatment of fractures by John B. Roberts of Philadelphia and one entitled "A Year's Work in Appendicitis," by John B. Deaver. There is also a very lengthy and well illustrated article on adult flat-foot, a subject of troublesome character to all, by Walter G. Stern, Cleveland. The work is in keeping with the usual high standard maintained by the authors and publishers.

CATALOGUE OF MEDICAL AND SURGICAL WORKS

Published in the United States, alphabetically arranged by the authors and classified under subjects, 1912-1913.

Published by W. B. Saunders Company, Philadelphia and London.

THE BLOOD OF THE FATHERS

A play in four acts by G. Frank Lydston, M. D., cloth, 243 pages. The Riverton Press, Chicago, 1912. This is a remarkable little volume devoted to the control and regulation of marriage, a plea for matrimonial discrimination, for the protection of the unborn, for the sterilization of degenerates and a general plea for the elevation of the morals and tone of our police system and a study of criminology in general. The book will attract the sociologist and give the reader much food for thought and contemplation.

MUSCLE SPASM AND DEGENERATION.

Muscle Spasm and Degeneration in Intrathoracic Inflammations and Light Touch Palpation by Francis Marion Pottenger, A. M., M. D., L. L. D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California, with 16 illustrations, Cloth, 105 pages, price $2.00, St. Louis, C. V. Mosby Company, 1912.

This volume deals with the finer points of diagnosis of intrathoracic inflammation, especially tubercular involvments by obser-

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vation, palpation and percussion of the chest and neck and observations generally of the topography of the chest.

Dr. Pottenger is one of our authorities and his work is that of a close student in his chosen field, tuberculosis, and this book is the result of examinations of several thousand cases with close checking by other systems of diagnosis. It will be found of great interest to those interested in the diseases of the chest and lungs.

DISEASES OF STOMACH, INTESTINES AND PANCREAS.

THE NEW (2ND) EDITION, ENLARGED.

Diseases of the Stomach, Intestines, and Pancreas. By Robert Coleman Kemp, M. D., Professor of Gastro-intestinal Diseases, New York School of Clinical Medicine. Second edition, revised and enlarged. Octavo of 1021 pages, with 388 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $6.50 net; Half Morocco, $8 net.

This is a remarkably good book, covering much more than the previous edition. The chapters on Colon Bacillus Infection and Diseases of the Pancreas are entirely new and are good additions to the former work.

The chapters devoted to Duodenal Ulcer have been rewritten.

The author very properly takes issue with the recent tendency in the profession with reference to increased feeding in typhoid and holds that the amounts recently recommended by some enthusiasts—3500 to 5500 hundred calories—prolongs the temperature and is not good practice.

The chapters on appendicitis are very sensible. More than one hundred pages are taken up in the consideration of diseases of the pancreas which, to both surgeon and internist is a most interesting subject.

The book is well illustrated, the text is very full and copious and the collateral literature on the questions involved is widely quoted.

This work will receive a hearty welcome from the profession and will be found to be an invaluable aid to the physician and surgeon.

THE PRACTICE OF GYNECOLOGY.

FIFTH EDITION, THOROUGHLY REVISED.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. Easterly Ashton, M. D., LL. D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Fifth Edition, Thoroughly Revised. Octavo of 1100 pages,

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with 1050 original line drawings. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $6.50 net; Half Morocco, $8 net.

Ashtons' Gynecology has deservedly become one of the most popular works in its class before the medical profession. This later edition deserves the thoughtful consideration of all gynecologic operators. The work is on the same general plan of its predecessors and deserves special notice on account of the following charcteristics:

The volume is well printed and illustrated, many of the cuts are new to this edition and the text and cuts are closely parallel. A feature of the cuts is that the necessary instruments and sutures used in each operation are clearly shown and the cuts of each operation are plentiful enough to make clear to any one the operation as described step by step.

This book can be heartily recommended to every student of medicine and especially to those practitioners who are taking up the study of gynecology with a view to simplicity and perfection in operative technique.

This work contains additions to the literature on the palliative treatment of cancer, the newer treatments of syphilis, cystitis, a thorough revision and consideration of gonorrhoeal infections of the uterus and tubes, the causative influence of "hormone" or an internal secretion of the ovaries in the production of diseases peculiar to women and the Fowler-Murphy treatment of suppurative peritonitis.

PRACTICAL MEDICINE SERIES.

Volume 5, OBSTETRICS Edited by Joseph B. DeLee, A. M., M. D. Professor of Obstetrics Northwestern University Medical School, with the collaboration of Herbert M. Stowe, M. D., Cloth 229 pages, illustrated price $1.25, Chicago, The Year Book Publishers, 180 North Dearborn Street.

This is a good review of recent obstetrical literature with profuse editorial comment and is very useful to those desiring a good reference to recent works and advances on the subject.

Volume 6, GENERAL MEDICINE, Edited by Frank Billings, M. S., M. D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago and J. H. Salisbury, A. M., M. D., Professor of Medicine, Chicago Clinical School. Cloth 350 pages illustrated. Price $1.50. The Year Book Publishers, 180 North Dearborn Street, Chicago.

This is the second volume on the subject of general medicine for this year in this series and is a continuation of the previous volume, but not a repetition of subject.

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SOME VALUABLE PRODUCTS FOR THE TREATMENT OF DISEASES OF BACTERIAL ORIGIN.

Since the advent of diphtheria antitoxin it is doubtful if any new remedial agent has elicited greater interest than is now being manifested in the bacterial derivatives known as Phylacogens. These products were originated by Dr. A. F. Schafer, of California, the method of preparation and technique of application being first presented to the San Joaquin Medical Society in Fresno. To the uninitiated it may be said that the term Phylacogen (pronounced phy-LAC-o-gen) means "phylaxin producer," being derived from two Greek words signifying "a guard" and "to produce." The Phylacogens are sterile aqueous solutions of metabolic substances generated by bacteria grown in artificial media. They are produced from a large variety of pathogenic bacteria such as the several staphylococci, streptococcus, pyogenes, bacillus pyocganeus, diplococcus pneumoniae, bacillus typhosus, bacillus coli commus, streptacoccus rheumaticus, streptacoccus erysipelatis etc.

Four phylacogens are now offered to the medical profession: Mixed Infection Phylacogen (used in the treatment of bacterial diseases of unknown etiology), Rheumatism Phylacogen, Erysipelas Phylacogen, and Gonorrhea Phylacogen. They have been thoroughly tested clinically and are said to be producing excellent results in the treatment of the various pathological conditions in which they are indicated. They are administered hypodermically—subcutaneously or intravenously—preferably by the former method, the latter being advised only in cases in which a quick result is demanded. They are supplied in hermetically sealed glass vials of 10 Cc. capacity.

The Phylacogens are prepared and marketed by Parke, Davis & Co., who have recently issued a 24-page pamphlet which describes them in detail—the process of manufacture, therapeutic indications, dosage, methods of administration—everything, in fact, that needs to be known by the man who desires to use phylacogens. Every physician in general practice, every practitioner who desires to keep abreast of the latest advances in bacterial therapy, should have a copy of this valuable booklet. Write Parke, Davis & Co., at their general offices in Detroit, Michigan, ask for the "Phylacogen pamphlet," and mention this journal.

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Next Meeting—

Address all communications to the Secretary.

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